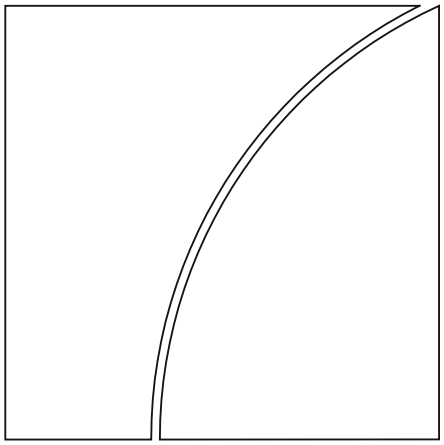
Basel Committee
on Banking Supervision



Basel III
Monitoring Report

March 2025

BIS

Queries regarding this document should be addressed to the Secretariat of the Basel Committee on Banking Supervision (e-mail: qis@bis.org).

Since the report published in September 2021, the monitoring reports no longer include a statistical annex. However, the data underlying the graphs are available for download as a separate Excel file. This presents the same data as the Annex in previous reports but in a format that is easier to use for readers' own analyses. Some analyses that were previously presented in the leverage ratio, liquidity and credit risk sections of the report have been published as Tableau dashboards. Additional analyses presented in the report will be made available in this innovative format in the coming months. The Committee welcomes any feedback on these new formats at qis@bis.org.

This publication is available on the BIS website (www.bis.org/bcbs/qis/).

Grey underlined text in this publication shows where hyperlinks are available in the electronic version.

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Basel III Monitoring Report

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Conventions used in this report

billion thousand million
trillion thousand billion
lhs, rhs left-hand scale, right-hand scale

Group 1 banks are those that have Tier 1 capital of more than €3 billion and are internationally active. All other banks are considered Group 2 banks.

Components may not sum to totals because of rounding.

The term "country" as used in this publication also covers territorial entities that are not states as understood by international law and practice but for which data are separately and independently maintained.

All data, including for previous reporting dates, reflect revisions received up to 28 January 2025.

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Highlights of the Basel III monitoring exercise as of 30 June 2024

Basel III risk-based capital ratios increase while leverage ratio and NSFR remain stable for large internationally active banks

To assess the impact of the Basel III framework on banks, the Basel Committee on Banking Supervision monitors the effects and dynamics of the reforms. For this purpose, a semiannual monitoring framework has been set up for the risk-based capital ratio, the leverage ratio and liquidity metrics, using data collected by national supervisors on a representative sample of institutions in each country. Since the end-2017 reporting date, this report has also captured the effects of the Committee's finalisation of the Basel III reforms.[1] This report summarises the aggregate results using data as of 30 June 2024.[2] The Committee believes that the information contained in the report will provide relevant stakeholders with a useful benchmark for analysis.

Information considered for this report was obtained from voluntary and confidential submissions of data from individual banks and their national supervisors. At the jurisdictional level, there may be ongoing mandatory data collection, which also feeds into this report. Data were included for 176 banks, including 115 large internationally active ("Group 1") banks, among them 29 global systemically important banks (G-SIBs) and 61 other ("Group 2") banks.[3] Members' coverage of their banking sector is very high for Group 1 banks, reaching 100% coverage for some countries, while coverage is lower for Group 2 banks and varies by country.

In general, this report does not consider any transitional arrangements such as grandfathering arrangements. Rather, the estimates presented assume full implementation of the Basel III requirements based on data as of 30 June 2024. No assumptions have been made about banks' profitability or behavioural responses, such as changes in bank capital or balance sheet composition, since this date or in the future. Furthermore, the report does not reflect any additional capital requirements under Pillar 2 of the Basel III framework.

[1] See Basel Committee on Banking Supervision, *High-level summary of Basel III reforms*, December 2017, www.bis.org/bcbs/publ/d424_hlsummary.pdf; Basel Committee on Banking Supervision, *Basel III: finalising post-crisis reforms*, December 2017, www.bis.org/bcbs/publ/d424.htm.

[2] A list of previous publications is included in Annex C.

[3] Group 1 banks are those that have Tier 1 capital of more than €3 billion and are internationally active. All other banks are considered Group 2 banks. Not all banks provided data relating to all parts of the Basel III framework.

Overview of results (unbalanced sample) Table 1

	31 December 2023[1]			30 June 2024		
	Group 1	Of which: G-SIBs	Group 2	Group 1	Of which: G-SIBs	Group 2
Current Basel III framework						
CET1 ratio (%)	13.1	12.8	18.2	13.4	13.2	18.9
Target total capital shortfalls (€ bn)[2]	0.0	0.0	0.0	0.0	0.0	0.0
TLAC shortfall 2022 minimum (€ bn)	24.8	24.8		19.4	19.4	
Total accounting assets (€ bn)	86,121	59,456	4,106	82,626	61,751	2,751
Leverage ratio (%)[3]	6.1	6.1	6.6	6.1	6.0	6.7
LCR (%)	138.2	135.0	201.5	136.0	133.6	194.0
NSFR (%)	122.6	122.8	133.9	123.6	123.8	138.1
Fully phased-in final Basel III framework (2028)						
Change in Tier 1 MRC at the target level (%)	1.3	0.0	8.0	1.9	1.5	5.2
CET1 ratio (%)	13.5	13.4	16.6	13.1	12.9	17.6
Target capital shortfalls (€ bn); of which:	0.0	0.0	0.0	0.9	0.9	0.0
CET1	0.0	0.0	0.0	0.0	0.0	0.0
Additional Tier 1	0.0	0.0	0.0	0.0	0.0	0.0
Tier 2	0.0	0.0	0.0	0.9	0.9	0.0
TLAC shortfall 2022 minimum (€ bn)	31.1	31.1		19.6	19.6	
Leverage ratio (%)[3]	6.1	6.0	6.6	6.1	6.0	6.8

See Table A.4 for the target level capital requirements. [1] The values for the previous period may differ slightly from those published in the previous report. This is caused by data resubmissions for previous periods to improve the underlying data quality and enlarge the time series sample. [2] These use the 2017 definition of the leverage ratio exposure measure. [3] The leverage ratios reflect temporary exclusions from leverage exposures introduced in some jurisdictions.

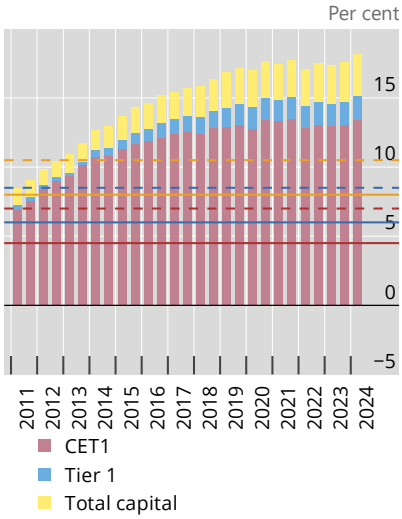
Source: Basel Committee on Banking Supervision.

- Compared with the end-December 2023 reporting period, the average Common Equity Tier 1 (CET1) capital ratio under the current Basel III framework increased from 13.1% to 13.4% for Group 1 banks in H1 2024.
- The average impact of the Basel III framework on the Tier 1 minimum required capital (MRC) of Group 1 banks increased (+1.9%) when compared with end-December 2023. The average increase for G-SIBs is 1.5%.
- There is a minor capital shortfall under the final Basel III framework in H1 2024 while there was no shortfall in the previous period.
- Applying the 2022 minimum total loss-absorbing capacity (TLAC) requirements and the current Basel III framework, two of the 18 G-SIBs reporting TLAC data reported an aggregate incremental shortfall of €19.6 billion.
- The average Liquidity Coverage Ratio (LCR) of Group 1 banks is slightly lower at 136.0% compared with the last reporting date, while the average Net Stable Funding Ratio (NSFR) increased from 122.6% to 123.6%.

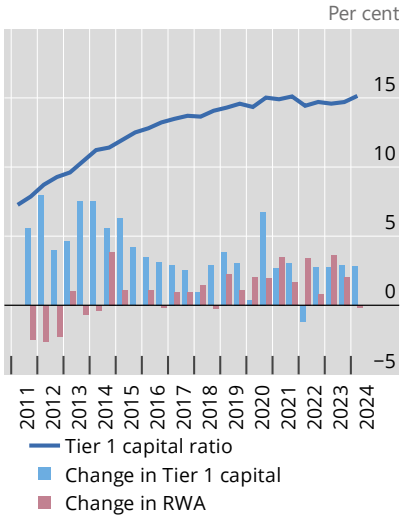
Current Basel III capital ratios show a sizeable increase, driven by the rest of the world

Group 1 banks, balanced data set — Graph 1

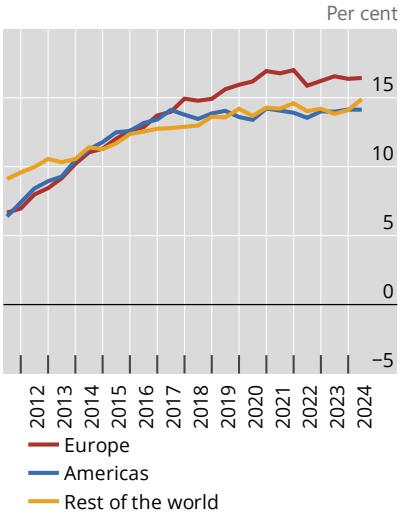
CET1, Tier 1 and total capital ratios[1]



Determinants of changes[2]



Tier 1 ratios by region



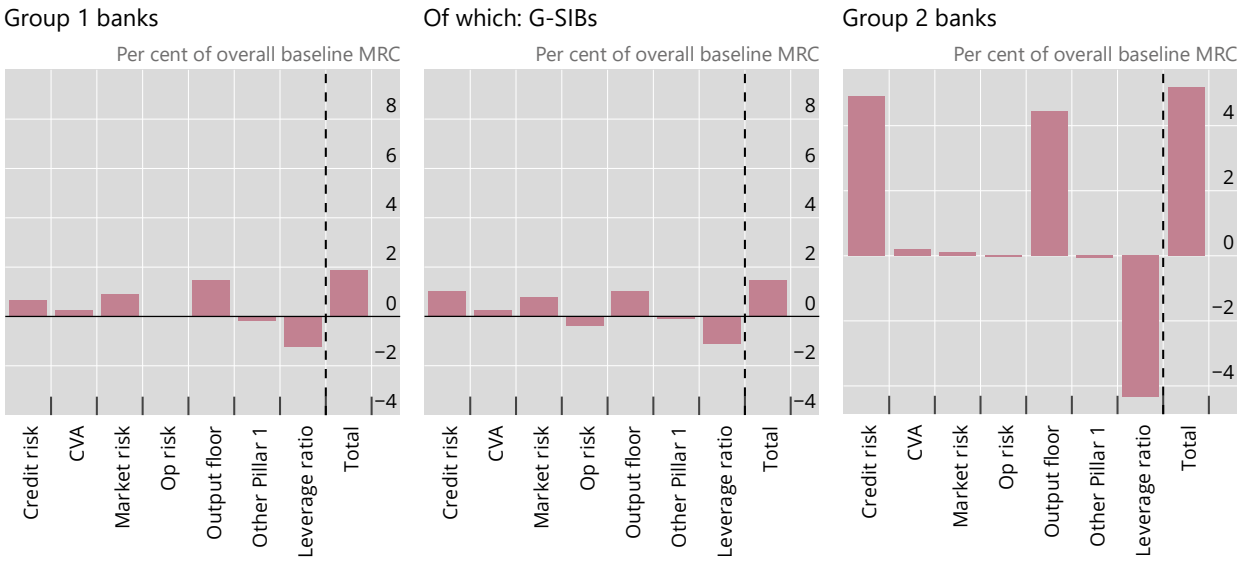
[1] The solid lines depict the relevant minimums, the dotted lines the minimums plus the capital conservation buffer. See Table A.4 for the relevant levels. [2] Exchange rates as at the current reporting date.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

- The balanced data set for Group 1 banks showed a sizeable increase in current Basel III capital ratios in H1 2024, driven by an increase in Tier 1 capital of a larger magnitude than the increase in risk-weighted assets (RWA). The overall CET1 capital ratios for Group 1 banks in the balanced data set were 13.4% in June 2024.
- Currently, the Tier 1 capital ratios are higher in Europe than in the Americas and the rest of the world region. However, this relationship was the reverse from 2011 to 2014. The rest of the world region is also the main driver for the increase in H1 2024.

Impact of final Basel III standards for Group 1 banks is higher compared with the previous exercise

Change in Tier 1 MRC at the target level due to the final Basel III standards — Graph 2



Credit risk shows the change in minimum required capital (MRC) due to revised standardised and internal ratings-based approaches, including securitisation. Operational risk figures may not show supervisor-imposed capital add-ons under Pillar 2. Therefore, changes in MRC may be overestimated. Output floor results are net of the existing Basel I-based floor according to national implementation of the Basel II framework. The target level accounts for Tier 1 minimum capital requirements and the capital conservation buffer (ie resulting in an 8.5% Tier 1 capital requirement) as well as any applicable G-SIB surcharge.

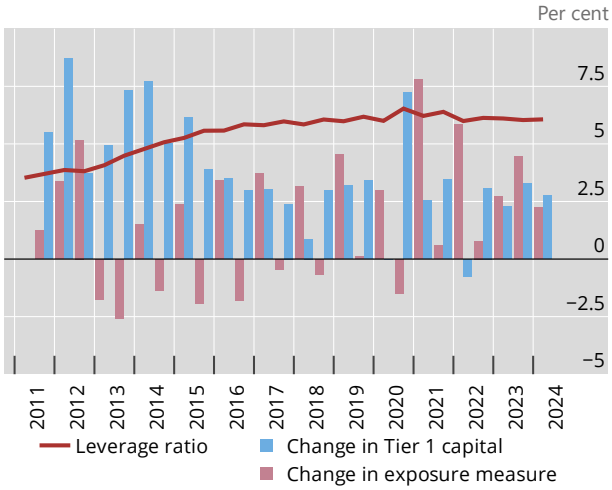
Source: Basel Committee on Banking Supervision. See also Table 4.

- For Group 1 banks, the Tier 1 MRC would increase by 1.9%, following the full phase-in of the final Basel III standards. The increase in the MRC is underpinned by the incremental impact of the risk-based requirements by 3.1%, offset by the reduction in leverage ratio requirements by 1.2 percentage points. The increase in risk-based components is mainly driven by the output floor (+1.5%), market risk (+0.9%) and credit risk (+0.7%).
- The average impact of the final Basel III framework on Group 1 banks, at +1.9%, is higher than the end-December 2023 value of +1.3%.
- The impact on MRC across regions varies considerably for Group 1 banks, with a very moderate increase in the Americas (+0.2%), an increase in the rest of the world region (+1.7%) and, in contrast, a strong increase in MRC for European banks (+4.0%).
- For Group 2 banks, the overall 5.2% increase in Tier 1 MRC is driven by an increase in the risk-based measure of 9.5%, stemming mainly from credit risk (+4.9%) and the output floor (+4.3%), which is partially offset by a reduction in leverage ratio MRC (–4.3%).

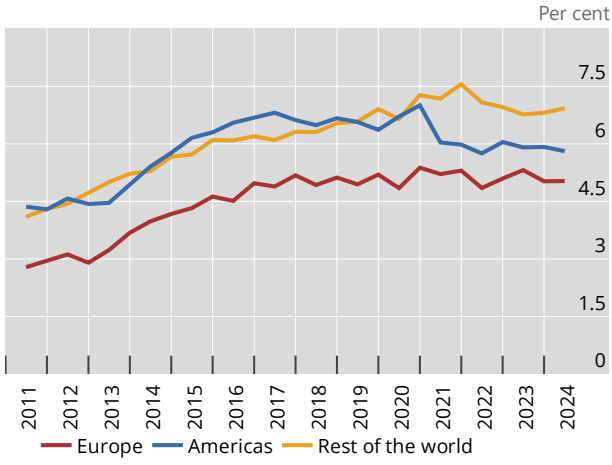
Fully phased-in Basel III leverage ratios[1] of large internationally active banks were relatively stable in H1 2024

Group 1 banks, balanced data set, exchange rates as at the current reporting date — Graph 3

Leverage ratios and their determinants



Leverage ratios by region



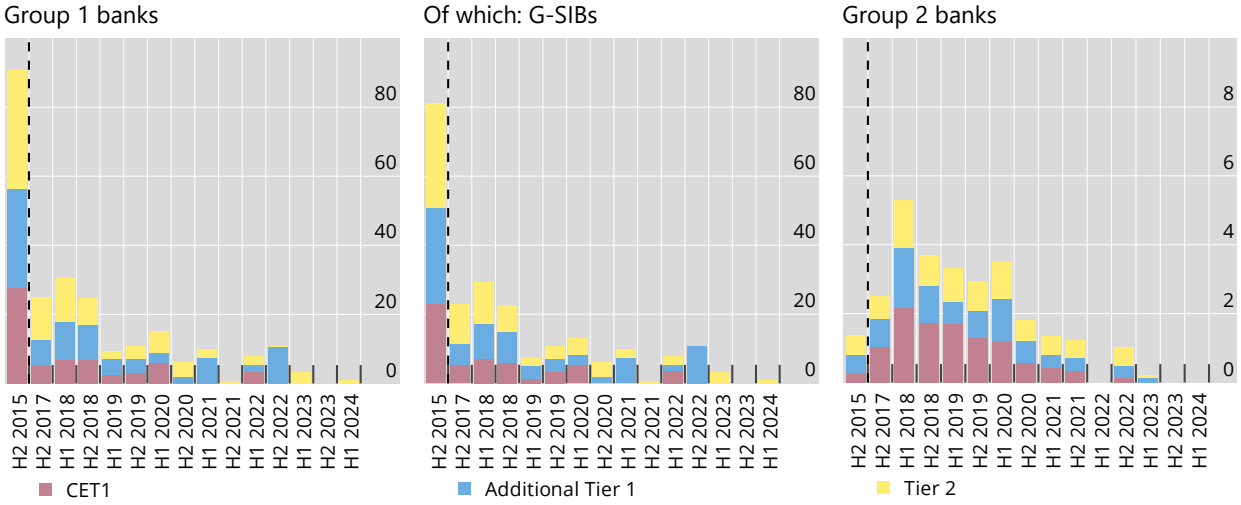
[1] Data points from H1 2011 to H2 2012 use the original definition of the leverage ratio. Data points from H1 2013 to H1 2017 use the definition of the leverage ratio set out in the 2014 version of the framework. Note that the data points for H1 2013 use an approximation for the initial definition of the Basel III leverage ratio exposure where gross instead of adjusted gross securities financing transaction values are used. Data points from H2 2017 onwards use the final definition of the leverage ratio to the extent data are available. Temporary exclusions from the leverage ratio exposure measure in the context of Covid-19 have not been added back.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

- For the balanced data set of Group 1 banks, the leverage ratio was relatively stable in the current reporting period. This contrasts with the sharp decrease that started at end-2021, particularly for the Americas.
- Leverage ratios for Group 1 banks are still lower in Europe (5.0%) than in the Americas (5.8%) and the rest of the world (6.9%).
- For the unbalanced data set at the end-June 2024 reporting date, the average fully phased-in final Basel III Tier 1 leverage ratios are 6.1% for Group 1 banks, 6.0% for G-SIBs and 6.8% for Group 2 banks.

Minor capital shortfall at the target level under the final Basel III standards for one large internationally active bank

Fully phased-in final Basel III standards,[1] sample and exchange rates as at the reporting dates — Graph 4



[1] Results for H2 2015 are based on the Committee's cumulative Quantitative Impact Study and are not fully comparable from a methodological point of view. Compared with H2 2017 and H1 2018, the results since H2 2018 include the revised market risk framework as finalised in January 2019.

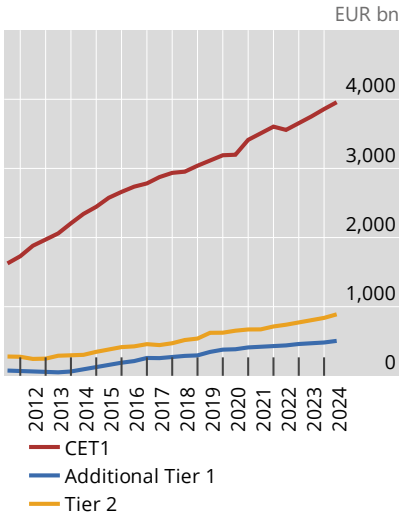
Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

- For this reporting date, one G-SIB reported a regulatory capital shortfall for of €0.9 billion.

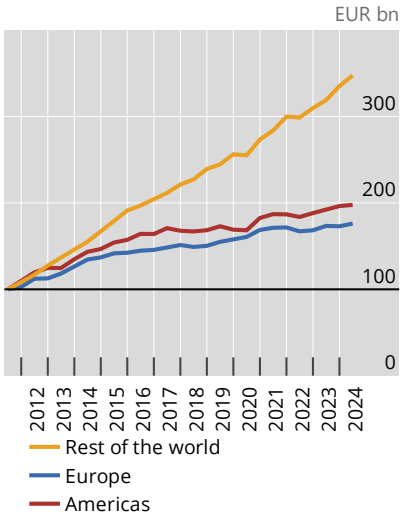
Capital and dividend payout ratio for large internationally active banks increased

Group 1 banks, balanced data set, exchange rates as at the current reporting date — Graph 5

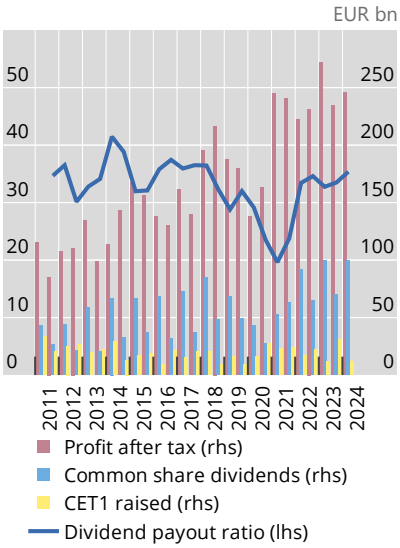
Level of capital



Change in CET1 by region



Profits, dividends and CET1 capital raised externally[1]



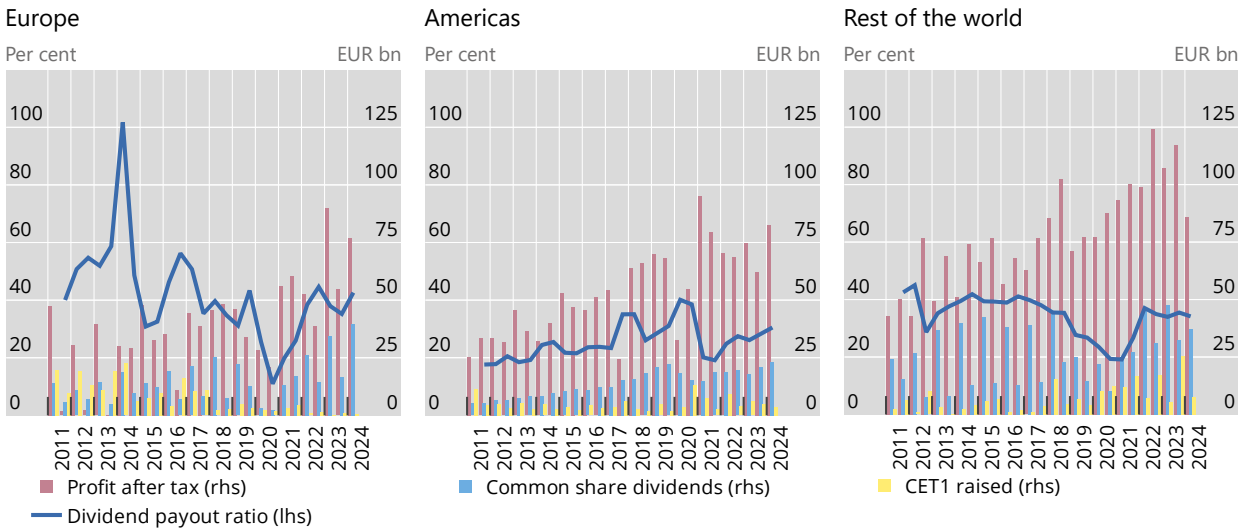
[1] The dividend payout ratio is calculated as common share dividends divided by profits after tax by using a rolling 12-month window.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

- From end-June 2011 to end-June 2024, the level of Group 1 banks' CET1 capital increased by 143% from €1,626 billion to €3,957 billion. Since end-December 2023, Group 1 CET1 capital has increased by €99 billion (or 3.0%).
- Over H1 2024, CET1 capital increased across all regions, with the most notable increment in the rest of the world.
- Overall, profits after tax increased for the Group 1 banks in the sample and stood at €245.4 billion in H1 2024, but still below their peak as observed in end-June 2023. The dividend payout ratio stood at 35.4%, which is about 187 basis points above the one reported in the preceeding period.

Dividend payout ratios varied across regions

Group 1 banks, balanced data set, exchange rates as at the current reporting date — Graph 6



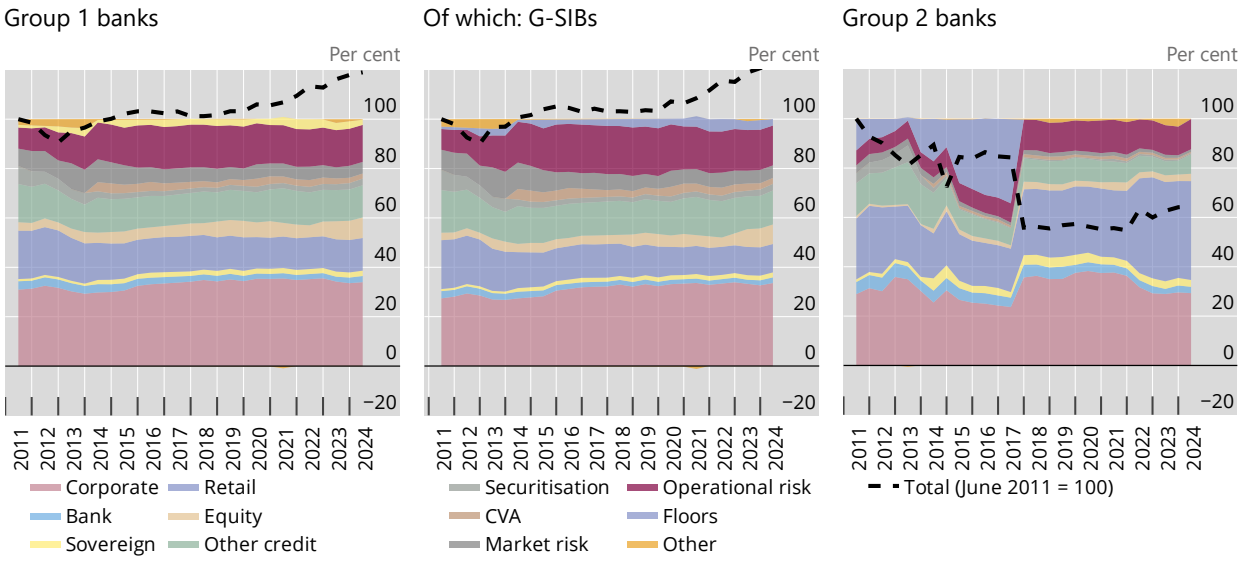
The dividend payout ratio is calculated as the common share dividends divided by profits after tax by using a rolling 12-month window.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

- Annual after-tax profits for the Group 1 banks (ie summed up over two consecutive reporting dates) increased moderately in Europe (+2.4%), while they remained largely flat in the Americas and declined by 12.3% in the rest of the world, compared with the 12-month period ending June 2023. The significant spike in Europe in H1 2023 is driven by non-recurring profits due to a merger between two banks.
- Compared with the previous reporting date, the annual dividend payout ratio has increased in Europe and the Americas, while it decreased in the rest of the world. It is significantly below the record high ratios observed in 2019 and 2020 in the Americas, while it is at pre-pandemic levels in Europe and the rest of the world.

Analysis of the share of MRC by asset class[1] according to current rules shows stable credit risk MRC

Balanced data set — Graph 7



[1] "Other credit" includes exposures subject to partial use of the standardised approach for credit risk that cannot be assigned to a specific asset class, past-due items under the standardised approach, capital requirements specified in Part 1 of the Basel II framework, capital requirements for other assets and additional capital requirements due to regulatory calculation differences if there is a shortfall of provisions over expected loss amounts for exposures subject to the internal ratings-based (IRB) approach for credit risk. The category "other" includes Pillar 1 capital requirements in member countries for risks not covered by the Basel Framework, and reconciliation differences (ie shortfalls of provisions over expected loss amounts for exposures subject to the IRB approach for credit risk). The term "reconciliation differences" refers to the difference between MRC reported at the entire bank level and the sum of MRC reported for the individual asset classes.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

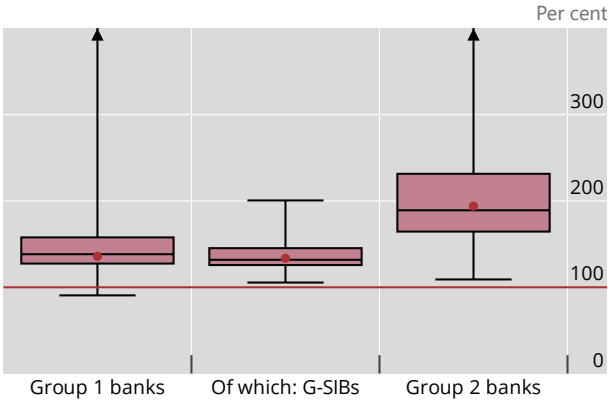
- As of June 2024 and for a balanced data set of Group 1 banks, non-securitisation credit risk[4] continues to be the dominant portion of overall MRC, on average covering 73.2% of total MRC. Among the non-securitisation credit risk asset classes, the share of MRC for corporate exposures increased from 31.0% at end-June 2011 to 34.0% at the current reporting date.
- The share of operational risk in MRC increased sharply from 8.5% at the end of June 2011 to 17.3% at end-2018 and then decreased to reach 15.0% at the current reporting date. The increase in the early 2010s was attributed in large part to the surge in the number and severity of operational risk events during and after the financial crises, which are factored into the calculation of MRC for operational risk under the advanced measurement approach. More recently, there has been some "fading out" of the financial crisis losses so that in 2022, the lowest loss level of the previous 10 years is observed. This explains the latest decrease in capital requirements, especially for the banks heavily affected in the Great Financial Crisis. In contrast, losses triggered by the Covid-19 pandemic are not yet having a significant impact on the loss severity level, but this may realise in the near future.
- The share of MRC for securitisation exposures declined from 7.4% to 2.7% between June 2011 and June 2024.

[4] Here, non-securitisation credit risk is defined as the sum of corporate, bank, sovereign, retail, equity and other credit, as illustrated in the graph.

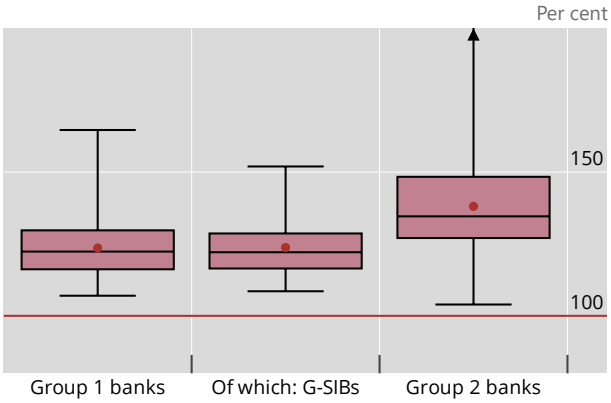
All banks exceeded the 100% threshold for NSFR, while three banks reported an LCR below 100%[1]

Overall distribution — Graph 8

Liquidity Coverage Ratio[2]



Net Stable Funding Ratio



[1] The median value is represented by a horizontal line, with 50% of the values falling in the 25th to 75th percentile range shown by the box. The upper and lower end points of the thin vertical lines show the range of the entire sample. In some cases, arrows at the top of the vertical line indicate banks with ratios outside the range shown in the graph. The dots represent weighted averages. The horizontal red lines represent the 100% minimums. [2] The sample is capped at 400%, meaning that all banks with an LCR above 400% were set to 400%.

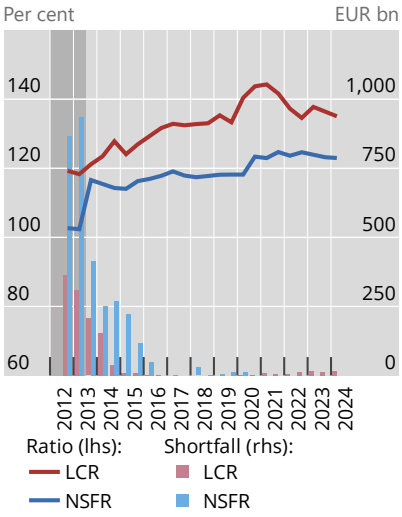
Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

- The weighted average LCR at end-June 2023 is 136.0% for Group 1 banks and 194.0% for Group 2 banks.
- In the current reporting period, three Group 1 banks had an LCR below 100% and hence a shortfall (ie the difference between high-quality liquid assets and net cash outflows), which amounts to €18.0 billion.
- The weighted average NSFR was 123.6% for Group 1 banks and 138.1% for Group 2 banks at end-June 2024.
- All banks reported an NSFR that exceeded 100%.

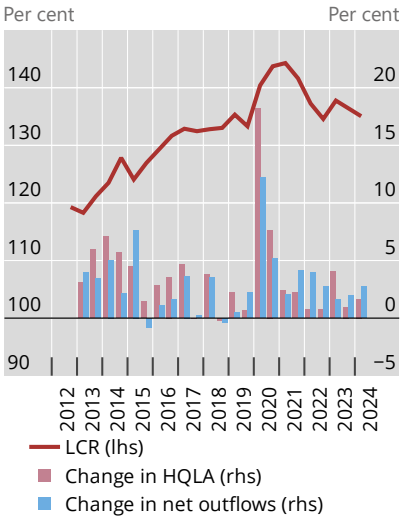
For Group 1 banks, LCRs decreased slightly while NSFRs are stable

Group 1 banks, balanced data set[1] Graph 9

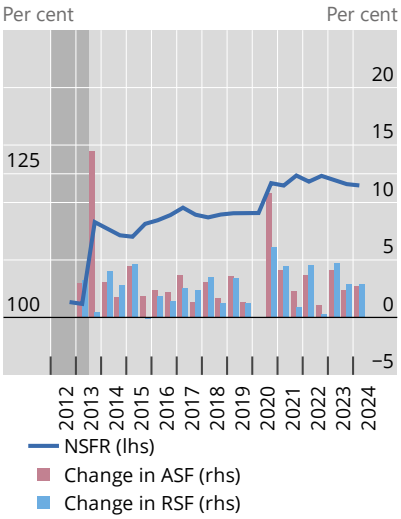
LCR, NSFR and related shortfalls[2]



LCR and change in its determinants[3]



NSFR and change in its determinants[3]



ASF = available stable funding; HQLA = high-quality liquid assets; RSF = required stable funding. [1] This graph depicts the NSFR as calculated under different versions of the NSFR framework released in December 2010, January 2014 and October 2014. Calculations performed according to the final standard approved by the Committee in October 2014 starting with the end-December 2014 reporting period. See Basel Committee on Banking Supervision, *Basel III: the net stable funding ratio*, October 2014, www.bis.org/bcbs/publ/d295.htm. Since the Committee did not collect NSFR data through its Basel III monitoring exercise for the end-June 2020 reporting date, the relevant data points show the same values as for end-December 2019. [2] Exchange rates as at the reporting dates. [3] Exchange rates as at the current reporting date.

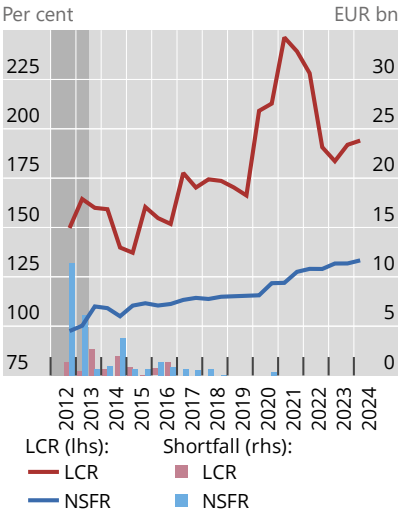
Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size. The worksheets "Graph 11d", "Graph 11g" and "Graph 11k" provide additional regional breakdowns for Group 1 banks. The "Liquidity Coverage Ratio" and "Net Stable Funding Ratio" dashboards on the Committee's website provide the same breakdowns for G-SIBs.

- For a balanced data set of Group 1 banks, all but two banks meet a 100% LCR at end-June 2024, resulting in an aggregate shortfall of €16.0 billion. The shortfall increased by €4.4 billion since December 2023. The average LCR for this sample decreased to 135.1% at end-June 2024 compared with 136.5% in the previous reporting period. Banks in the sample did not experience drops in the LCR during the turmoil that some banks outside the monitoring sample experienced.
- There was again no agreggate NSFR shortfall for the balanced data set of Group 1 banks. The average NSFR for the same sample of banks decreased very slightly from 123.2% to 123.0% in June 2024.
- Both LCR and NSFR were above pre-pandemic levels at the reporting date.

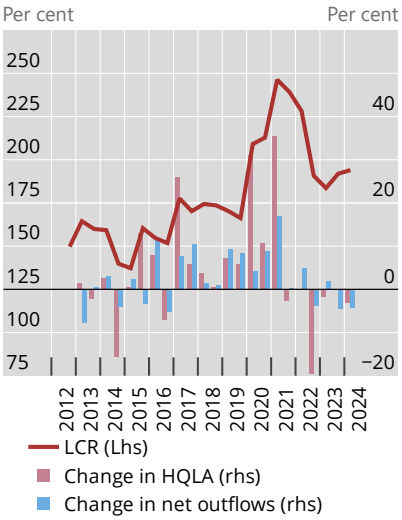
Group 2 banks showed an increase in both LCR and NSFR with no shortfalls

Group 2 banks, balanced data set[1] Graph 10

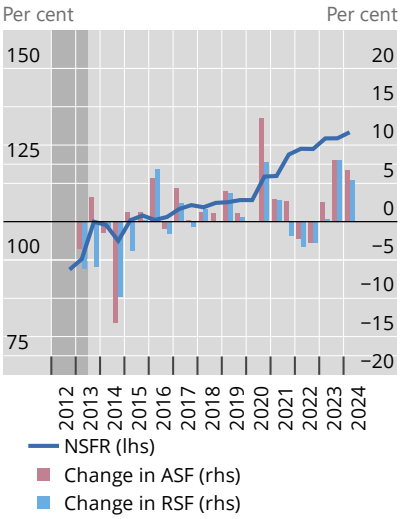
LCR, NSFR and related shortfalls[2]



LCR and change in its determinants[3]



NSFR and change in its determinants[3]



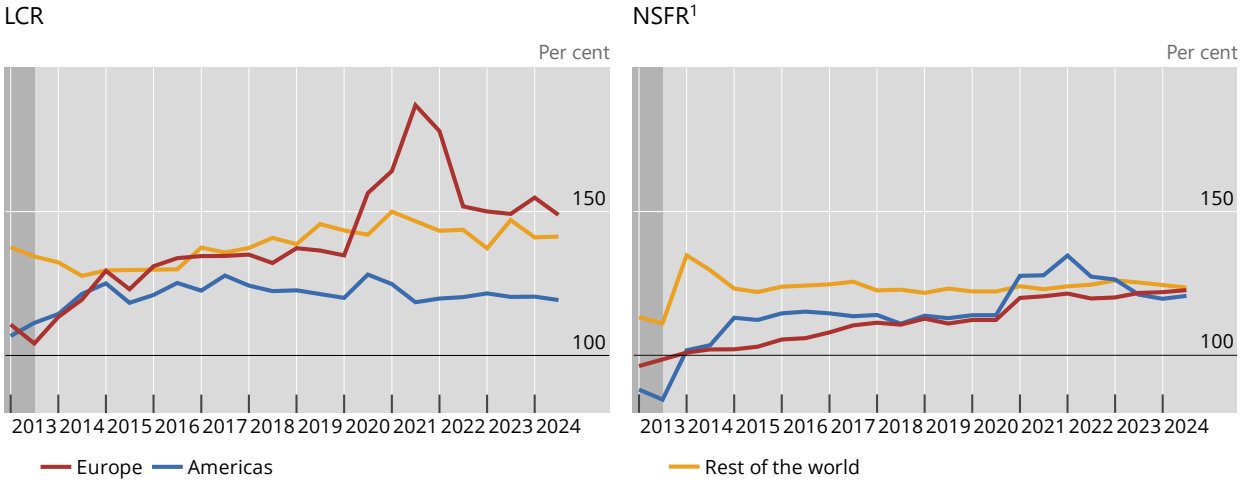
ASF = available stable funding; HQLA = high-quality liquid assets; RSF = required stable funding. [1] As described in footnote 1 to Graph 9, the NSFR time series depicts data reflecting NSFR standards released in December 2010, January 2014 and October 2014. [2] Exchange rates as at the reporting dates. [3] Exchange rates as at the current reporting date.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

- For a balanced data set of Group 2 banks, the LCR shortfall has remained at zero since June 2017. The average LCR for the same sample of banks increased by 2.1 percentage points to 194.0% in June 2024, caused by a decrease in net outflows compared with the last reporting date.
- The aggregate NSFR shortfall remained at zero for the balanced data set of Group 2 banks. The average NSFR for the same sample of banks increased slightly by 1.6 percentage points to reach 133.3% in June 2024.

For Group 1 banks, LCRs decreased in Europe, while NSFRs were mostly stable across all regions

Group 1 banks, balanced data set — Graph 11



[1] The NSFR time series depicts data reflecting NSFR standards released in December 2010, January 2014 and October 2014.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

- Since 2020, the weighted average LCR for both Europe and the rest of the world has largely been above 140%, while the average LCR for the Americas has been around 120%. While Europe and the Americas initially had lower average LCRs compared with the rest of the world, the average LCRs of Europe and the rest of the world tended to gradually converge before the onset of the pandemic. The regions with lower end-2012 average ratios saw significant increases, in particular between end-2012 and June 2014, and Europe saw such increases again at the start of the pandemic. The increase in Europe was reversing between June 2021 and June 2022, although since then the LCR of European banks is still above end-2019 levels.
- The weighted average NSFR at end-June 2024 for Group 1 banks in each of the three regions was well in excess of 100%. The average NSFR in Europe decreased from 120.5% at end-December 2023 to 119.3% at end-June 2024. After a significant drop during H1 2022, the NSFR of banks in the Americas reverts, landing at 120.7% at end-June 2024.

Detailed results of the Basel III monitoring exercise as of 30 June 2024

1. General remarks

At its 12 September 2010 meeting, the Group of Governors and Heads of Supervision (GHOS), the oversight body of the Basel Committee on Banking Supervision, announced a substantial strengthening of existing capital requirements and fully endorsed the agreements it had reached on 26 July 2010.[5] These capital reforms, together with the introduction of two international liquidity standards, are collectively referred to as "initial phase of Basel III reforms" or in short "initial Basel III" within this report. On 7 December 2017, the GHOS finalised the Basel III reforms[6] with a number of revisions that seek to restore credibility in the calculation of risk-weighted assets (RWA) and capital ratios of banks (referred to as "final Basel III" in this report). The Committee monitors and evaluates the impact of these capital, leverage and liquidity requirements on a semiannual basis.[7] This report summarises the results of the latest Basel III monitoring exercise using data as of 30 June 2024.[8] The Committee believes that the information contained in the report will provide relevant stakeholders with a useful benchmark for analysis.

Since the report published in September 2021, the monitoring reports no longer include a statistical annex. However, the data underlying the graphs are available for download as a separate Excel file. This presents the same data as the Annex in previous reports but in a format that is easier to use for readers' own analyses. Furthermore, most analyses have also been published as Tableau dashboards.[9] The Committee welcomes any feedback on these new formats at qis@bis.org.

1.1 Scope of the monitoring exercise

Almost all Committee member countries participated in the Basel III monitoring exercise as of 30 June 2024. The estimates presented are based on data submitted by the participating banks and their national

[5] See the 26 July 2010 press release "The Group of Governors and Heads of Supervision reach broad agreement on Basel Committee capital and liquidity reform package", www.bis.org/press/p100726.htm, and the 12 September 2010 press release "Group of Governors and Heads of Supervision announces higher global minimum capital standards", www.bis.org/press/p100912.htm.

[6] Basel Committee on Banking Supervision, *High-level summary of Basel III reforms*, December 2017, www.bis.org/bcbs/publ/d424_hlsummary.pdf; Basel Committee on Banking Supervision, *Basel III: finalising post-crisis reforms*, December 2017, www.bis.org/bcbs/publ/d424.htm.

[7] A list of previous publications is included in Annex C.

[8] The data for Japan are as of the end of March 2024, as banks in that country report on a biannual basis as of the end of March and the end of September to correspond to their fiscal years. Further, the data for Canada reflect a reporting date of 30 April 2024.

[9] Given the reporting format for cryptoasset exposures has changed substantially following the Committee's publication of the final prudential standard on 16 December 2022 (www.bis.org/bcbs/publ/d545.htm), related analyses are only available as dashboards.

supervisors in reporting questionnaires and in accordance with the instructions prepared by the Committee.[10] The questionnaire covered components of eligible capital, the calculation of all aspects of RWA, the calculation of a leverage ratio and components of the liquidity metrics. Table A.3 in Annex A shows which standards are relevant for the different Basel III regimes (initial Basel III, transitional Basel III and the fully phased-in Basel III framework). Technically, the remaining difference between the transitional and the fully phased-in Basel III frameworks is the level of the output floor which is 55% in 2024 (transitional final Basel III framework) and 72.5% in 2028 (fully phased-in final Basel III framework). This report reflects the finalisation of the market risk framework published in January 2019.[11]

The final data were submitted to the Secretariat of the Committee by 28 January 2025. The purpose of the exercise is to provide the Committee and the public with an ongoing assessment of the impact on participating banks of the capital and liquidity standards set out in the Basel standards.

The Committee appreciates the significant efforts contributed by both banks and national supervisors to this ongoing data collection exercise.

1.2 Sample of participating banks

Data on the initial Basel III framework were included for 176 banks, including 115 Group 1 banks and 61 Group 2 banks.[12] Group 1 banks are those that have Tier 1 capital of more than €3 billion and are internationally active. All other banks are considered Group 2 banks. Compared with end-December 2023 with 118 Group 1, 62 Group 2 banks and 180 banks overall, the sample decreased by three banks for Group 1 and by one bank for Group 2. The impact of the final Basel III framework could only be assessed for a sample of 132 banks, among which 93 Group 1 banks and 39 Group 2 banks.[13] Note that these numbers also include banks that are already subject to some but not all aspects of the fully phased-in final Basel III reforms. For example, the final market risk framework and the fully phased-in output floor are not yet applicable to most banks in the sample.

Banks were asked to provide data at the consolidated level as of 30 June 2024. Subsidiaries are not included in the analyses to avoid double-counting. For Group 1 banks, members' coverage of their banking sector was very high, reaching 100% coverage for some countries. Coverage for Group 2 banks was lower and varied across countries.

For a number of banks data relating to some parts of the Basel III framework were unavailable. Accordingly, these banks are excluded from individual topics of the Basel III monitoring analyses due to incomplete data. In certain sections, data are based on a balanced data set. This data set represents only those banks that reported necessary data at the June 2011 (labelled "H1 2011") through June 2024 ("H1 2024") reporting dates, to make more meaningful period-to-period comparisons.[14] The balanced data set differs for the various analyses; typically, it includes around 72 Group 1 banks, of which 25 are G-SIBs, and around 17 Group 2 banks. The G-SIBs in the time series analyses are among those banks that have

[10] See Basel Committee on Banking Supervision, *Instructions for Basel III monitoring*, January 2021, www.bis.org/bcbs/qis/.

[11] Basel Committee on Banking Supervision, *Minimum capital requirements for market risk*, January 2019 (rev February 2019), www.bis.org/bcbs/publ/d457.htm.

[12] See Table B.1 and Table B.2 in the Statistical Annex for details on the sample. Also note that this table shows banks for which data were generally included for the specific topics, but not necessarily sufficiently complete to be used in all analyses.

[13] See Table B.4 and Table B.5 in the Statistical Annex for details on the sample for the assessment of the final Basel III framework. Also note that while all these banks provided data on the final Basel III credit and operational risk standards, some of them were unable to provide data on some other aspects of the final framework. To that extent, it was assumed that capital requirements would remain unchanged compared with the initial Basel III framework.

[14] The balanced data set also includes banks that merged with another bank in the balanced data set, provided data are available for all periods between the first reporting date included in an analysis and the last reporting date before the merger. In cases where a merger bank is included in a balanced data set, the sample sizes for the different periods can differ for one time series.

been classified as G-SIBs as of November 2024,[15] irrespective of whether they have also been classified as G-SIBs previously.

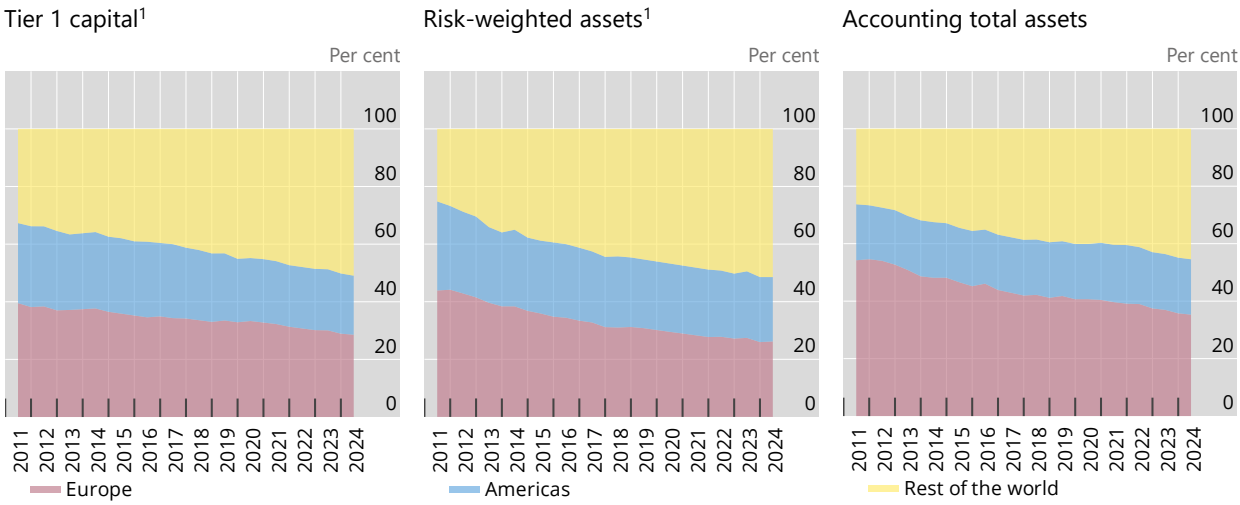
This report shows some of the results for three regional groupings – Europe, the Americas and the rest of the world. The allocation of jurisdictions to regions can be found on the dashboards on the Committee's website. Table B.3 provides some additional sample statistics for the banks included in the exercise at the reporting date both overall and by region for Group 1 banks.

For a balanced data set of Group 1 banks participating in this exercise, Graph 12 shows the share of the three regions distinguished in this report in three key indicators: Tier 1 capital, risk-weighted assets and accounting total assets, using exchange rates as at the current reporting date. Since end-June 2011, the share of the Americas in Tier 1 capital has declined by 7.3 percentage points to 20.5%, while the share in RWA decreased by 8.6 percentage points to 22.3%. The Americas' share in accounting total assets remained almost stable at 19.3%. The share of European banks decreased by 11.0 percentage points to 28.6% in terms of Tier 1 capital, by 17.7 percentage points to 26.2% in terms of RWA and by 18.9 percentage points to 35.3% in terms of accounting total assets. Conversely, the share of banks in the rest of the world increased by 18.3 percentage points to 51.0% in terms of Tier 1 capital, by 26.3 percentage points to 51.5% in terms of RWA and by 19.1 percentage points to 45.4% in terms of accounting total assets.

Regional share of Tier 1 capital, total RWA and accounting total assets over time

Fully phased-in current Basel III standards[1], Group 1 banks, balanced data set, exchange rates as at the current reporting date

Graph 12



[1] The graph shows the fully phased-in initial Basel III framework for the data points up to and including the end of 2018 and the actual current or final Basel III framework in place at the reporting date for all data points thereafter.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

[15] See www.fsb.org/work-of-the-fsb/market-and-institutional-resilience/global-systemically-important-financial-institutions-g-sifis/ for the lists of G-SIBs.

1.3 Methodology

1.3.1 Aggregation

Reported average amounts in this report have been calculated by creating a composite bank at a total sample level, which effectively means that the total sample averages are weighted. For example, the average common equity Tier 1 capital ratio is the sum of all banks' common equity Tier 1 (CET1) capital for the total sample divided by the sum of all banks' RWA for the total sample. Similarly, the average fully phased-in Basel III Tier 1 leverage ratio is the sum of all banks' fully phased-in Tier 1 capital for the total sample divided by the sum of all banks' Basel III leverage ratio exposures for the total sample.

1.3.2 Impact metrics

Throughout the report, effects of the reforms are frequently shown in terms of: (i) changes in minimum required capital (MRC); (ii) impact on capital ratios; and (iii) estimated capital shortfalls. MRC and shortfalls can be computed based on banks' minimum and target requirement levels. While the *minimum* levels reflect a risk-based 4.5% CET1, a 6% Tier 1 and an 8% total capital requirement as well as a 3% requirement for the Basel III leverage ratio, the *target* level also accounts for the capital conservation buffer (ie resulting in a 7% CET1, an 8.5% Tier 1 and a 10.5% total capital requirement), as well as any applicable G-SIB surcharge. Under the final Basel III framework, the target capital requirements also include the G-SIB buffer on the leverage ratio. Consistent with previous reports, this report does not reflect any additional capital requirements under Pillar 2 of the Basel framework. Since the end-2017 reporting date, it reflects any higher loss absorbency requirements for domestic systemically important banks, any countercyclical capital buffer requirements and any other higher domestic Pillar 1 requirements to the extent these have been reported. It also reflects any additional Pillar 1 RWA as reported by banks and their supervisors.

Reference points

Unless otherwise noted, the assessment of the final Basel III framework compares the fully phased-in final Basel III framework with the current Basel III framework as implemented by the national supervisor. While most banks are still subject to the national implementation of the initial Basel III framework, others already applied the transitional final Basel III framework for some or all risk types. The current framework reference point reflects this mix of frameworks across the sample.

Minimum required capital

Because the suite of post-crisis reforms includes revisions to RWA, expected loss (EL) amounts and the Basel III leverage ratio framework, the analysis of the final Basel III framework mainly focuses on MRC as a broad and integrated capital impact measure to aggregate the results. At the bank level, MRC is defined in this report as the sum of:

- the relevant target capital ratio level based on the Basel requirements times RWA, after consideration of all relevant floors;
- any capital effects from the treatment of EL amounts for credit risk and provisions at the relevant tier of capital, taking into account the split between defaulted and non-defaulted assets for those jurisdictions that require such a split;
- any capital effects from deductions which are an alternative to a 1,250% risk weighting treatment in certain national implementations of the Basel framework; and
- any incremental capital requirement (above the risk-based requirements including any floors) resulting from the Basel III leverage ratio.

This calculation is conducted for both the current *baseline* and the *revised* regimes. Changes in MRC are hence calculated as follows:

$$\%\Delta MRC = \frac{MRC_{revised} - MRC_{basis}}{MRC_{basis}}.$$

Therefore, this formula reflects, among other elements:

- changes to the calculation of RWA (at the asset class or risk type level RWA before output floors);
- changes to capital resulting from changes in the calculation of EL amounts for credit risk and the treatment of provisions;
- changes resulting from the move from the national implementation of the transitional Basel I-based floor (as collected through supervisory reporting systems) to the aggregate output floor under the final Basel III framework; and
- changes to the definition of the Basel III leverage ratio exposure measure for all banks and to its level for G-SIBs (see below for the treatment of Covid-19-related exclusions). Unlike the reports published until March 2024, the MRC baseline now reflects that from the H1 2023 reporting date some jurisdictions implemented the G-SIB buffer in their leverage ratio frameworks. This results in a lower leverage ratio impact compared to earlier periods.

Capital ratios

The impact of the reforms is also expressed in terms of its impact on capital ratios reflecting changes due to the reforms in both the numerator (through any effects on the treatment of EL amounts and provisions) and the denominator (through changes in RWA).

Leverage ratio

Temporary exclusions from the leverage ratio exposure measure in the context of Covid-19 have been added back to both the current and the fully phased-in leverage ratio exposure measures for the calculation of changes in MRC from the final Basel III framework at the relevant reporting dates. This separates the impact of the implementation of the final framework from the impact of the exclusions expiring. The exclusions have also been added back for the analysis of the combined shortfalls in Section 2.4 and for the analysis of the interactions between the regulatory measures in Section 5.2. However, the standalone analysis of the leverage ratio in Section 2.3 consistently reflects exclusions as applicable at the relevant reporting dates.

Combined shortfall analysis

In addition, a combined shortfall analysis at the three tiers of the Basel III capital ratios is conducted at the target level. The combined net shortfall at any capital tier is calculated as the difference (where positive) between the total required capital (accounting for both the risk-based requirements and the Basel III leverage ratio) at a given capital tier and the actual capital of the same tier held, net of any shortfall stemming from higher capital tiers. The last term is included since any higher tier capital (eg CET1) raised to meet a specific higher tier capital shortfall (eg CET1 shortfall) can also be used to meet any possible specific shortfall of a lower tier capital (eg any *additional* Tier 1 shortfall caused by risk-based and/or Basel III leverage ratio Tier 1 capital requirements).

1.3.3 Presentation

To preserve confidentiality, some of the results shown in this report are presented using box plot charts. The median value is represented by a horizontal line, with 50% of the values falling in the 25th to 75th percentile range shown by the box. The upper and lower end points of the thin vertical lines generally show the range of the entire sample; in some cases, arrows at the top of the vertical line indicate banks with values outside the range shown in the graph. Finally, weighted averages are represented by dots.

Since most of the transitional arrangements for the initial Basel III framework expired at end-2018 (see Box A), this report no longer distinguishes the transitional and fully phased-in initial Basel III framework in the body of the text. Rather, relevant time series show the fully phased-in initial Basel III framework for the data points up to and including the end of 2018 and the actual framework in place at the reporting date for all data points thereafter. Interested readers will find a selection of tables showing time series for other Basel III frameworks in the Excel files accompanying this report. Furthermore, to the extent data are available, all data for the initial Basel III framework consistently reflect the impact of the output floor in the Basel II framework and any national floors in place.

1.3.4 Time series analysis and comparisons

To provide additional operational capacity for banks and supervisors to respond to the immediate financial stability priorities resulting from the impact of Covid-19, the Committee decided not to collect Basel III monitoring data for the end-June 2020 reporting date. Therefore, only data from supervisory reporting were collected. Graphs and tables that fully or partially use data from the monitoring exercise use banks' end-December 2019 data points also for the end-June 2020 reporting date. Where this is the case, it is mentioned in a footnote. Such graphs show no change between end-December 2019 and end-June 2020, and the change for the full year 2020 is shown between the end-June 2020 and end-December 2020 data points.

Box A

Phase-in provisions for risk-based capital requirements

The initial Basel III framework includes the following phase-in provisions for capital ratios:

- Regulatory adjustments (ie possibly stricter sets of deductions that apply under Basel III) were fully phased in by 1 January 2018;
- Capital instruments that no longer qualify as non-common equity Tier 1 or Tier 2 capital were phased out beginning 1 January 2013. Fixing the base at the nominal amount of such instruments outstanding on 1 January 2013, their recognition is capped at 90% from 1 January 2013, with the cap reducing by 10 percentage points in each subsequent year;
- An additional 2.5% capital conservation buffer above the regulatory minimum capital ratios, which must be met with CET1 capital, was phased in by 1 January 2019; and
- The additional loss absorbency requirement for G-SIBs, which ranges from 1.0% to 2.5%, was fully phased in by 1 January 2019. It is applied as an extension of the capital conservation buffer and must be met with CET1.

The final Basel III framework as amended by the 27 March 2020 press release includes phase-in provisions for the output floor, which will start at 50% on 1 January 2023, rise in annual steps of 5% and be fully phased in at the 72.5% level from 1 January 2028. Furthermore, the increase in RWA can be capped at 25% during the phase-in period at national discretion. Table A.2 in Annex A includes a detailed overview of the Basel Committee's phase-in arrangements for the final Basel III framework.

1.4 Data quality

For this monitoring exercise, participating banks submitted comprehensive and detailed non-public data on a voluntary and best-efforts basis. On jurisdictional level, there may be ongoing mandatory data collection, which also feeds into this report. As with the previous studies, national supervisors worked extensively with banks to ensure data quality, completeness and consistency with the published reporting instructions. In addition, particular attention has been paid to the reconciliation of reported data with existing data from supervisory reporting systems. Banks are included in the various analyses below only to the extent that they were able to provide data of sufficient quality to complete the analyses.

1.5 Interpretation of results

The following caveats apply to the interpretation of results shown in this report:

- When comparing results to previous reports, sample differences as well as minor revisions to data from previous periods need to be taken into account. Sample differences also explain why results presented for the June 2023 reporting date in this report or the unbalanced time series presented in the dashboards may differ from the relevant data points in graphs and tables showing the time series for the balanced data set as described above.
- The actual impact of those new requirements that are covered in this analysis will almost certainly be less than shown in this report given banks' difficulty to assess the exact impact of the framework before its full implementation and interim adjustments made by the banking sector to changing economic conditions and the regulatory environment. Banks may use approximations when the implementation of an accurate impact assessment would be too costly. For example, the results do not consider bank profitability, changes in capital or portfolio composition or other management responses to the policy changes since 30 June 2024 or in the future. For this reason, the results are not comparable to industry estimates, which tend to be based on forecasts and consider management actions to mitigate the impact, as well as incorporate approximations where information is not publicly available.
- For banks that could not provide data on the impact of the revised standards for securitisation, credit valuation adjustment (CVA) or market risk, it was assumed that the respective capital requirements would remain unchanged in the assessment of the overall impact. Such banks were however excluded from the analysis of the relevant policy topic.
- Given that the output floor of the final Basel III framework only applies to overall capital requirements, it is not applied to individual risk types or asset classes in this report. To this extent, the results are not comparable to analyses in other reports, which may apply the output floor at more granular levels than required by the final Basel III framework.
- This report disregards any effects stemming from changes in accounting frameworks that may influence capital requirements and eligible capital.
- Several G-SIBs report conservative assumptions under the revised market risk framework.[16] Therefore, the results for market risk since the end-2020 reporting date only reflect 20%[17] of the contribution from equity investments in funds subject to the "other sector bucket" treatment, while all other changes from the revised market risk framework are included in the calculations as reported. This also impacts the results of several G-SIBs in particular and also of a number of other banks, albeit to a significantly smaller extent. Please refer to the previous reports for the treatment in previous reporting dates.
- Some capital requirements, such as Pillar 2 requirements for all periods and most buffers until the June 2017 reporting date, are not considered in the analysis. This tends to give more importance to leverage ratio requirements relative to risk-based requirements, compared with the actual situation where those additional requirements would be considered.

[16] Specifically, the banks are treating all trading book positions in equity investment in funds that may no longer be allowed to be modelled, using the most conservative standardised approach, ie the "other bucket" treatment subject to the highest applicable risk weights. They assumed that they are unable to use other treatments such as the index treatment or the mandate-based approach as set out in MAR21.36.

[17] This assumption is based on moving some equity investments in funds subject to the "other sector bucket" treatment to the "look-through" treatment, which would result in lower delta, vega and curvature requirements and higher diversification benefits.

2. Regulatory capital requirements and TLAC

Table 2 shows the aggregate capital ratios under the current, transitional final and fully phased-in final Basel III frameworks, as well as the related capital shortfalls. While most banks are still subject to the initial Basel III framework, others already applied the transitional final Basel III framework for some or all risk types. The "current" column reflects this mix of frameworks across the sample.

Aggregate capital ratios and (incremental) combined capital shortfalls at the target level[1]

Table 2

	Basel III capital ratios, in per cent			Combined risk-based capital and leverage ratio shortfalls at the target level, in billions of euros[2]		
		Final			Final	
	Current	Transitional	Fully phased-in	Current	Transitional	Fully phased-in
Group 1 banks						
CET1 capital	13.4	13.4	13.1	0.0	0.0	0.0
Tier 1 capital[3]	15.2	15.2	14.8	0.0	0.0	0.0
Total capital[4]	18.0	18.1	17.6	0.0	0.0	0.9
Sum				0.0	0.0	0.9
Of which: G-SIBs						
CET1 capital	13.2	13.2	12.9	0.0	0.0	0.0
Tier 1 capital[3]	15.0	15.0	14.6	0.0	0.0	0.0
Total capital[4]	18.0	18.1	17.7	0.0	0.0	0.9
Sum				0.0	0.0	0.9
Group 2 banks						
CET1 capital	18.9	18.2	17.6	0.0	0.0	0.0
Tier 1 capital[3]	20.1	19.3	18.7	0.0	0.0	0.0
Total capital[4]	22.2	21.4	20.8	0.0	0.0	0.0
Sum				0.0	0.0	0.0

[1] The target level includes the capital conservation buffer and the capital surcharges for 28 G-SIBs as applicable but does not include any countercyclical capital buffers. Samples for the initial and final Basel III frameworks are not consistent. [2] The shortfall is calculated as the sum across individual banks where a shortfall is observed. The calculation includes all changes to RWA (eg definition of capital, counterparty credit risk, trading book and securitisation in the banking book). The Tier 1 and total capital shortfalls are incremental assuming that the higher-tier capital requirements are fully met. All columns use the 2017 definition of the leverage ratio exposure measure. [3] The shortfalls presented in the Tier 1 capital row are *additional* Tier 1 capital shortfalls. [4] The shortfalls presented in the total capital row are *Tier 2* capital shortfalls.

Source: Basel Committee on Banking Supervision.

Table 3 shows CET1 capital ratios by regions. Details of capital ratios and capital shortfalls are provided in Section 2.1 and Section 2.4.

CET1 capital ratios

In per cent

Table 3

	Current Basel III standards		Final Basel III standards		
	Number of banks	Current	Number of banks	Transitional	Fully phased-in
Group 1 banks	115	13.4	97	13.4	13.1
Of which: Europe	39	14.8	29	13.3	12.6
Of which: Americas	23	12.8	16	13.4	13.4
Of which: RW	53	13.2	52	13.4	13.1
Of which: G-SIBs	29	13.2	27	13.2	12.9
Group 2 banks	61	18.9	42	18.2	17.6

Source: Basel Committee on Banking Supervision.

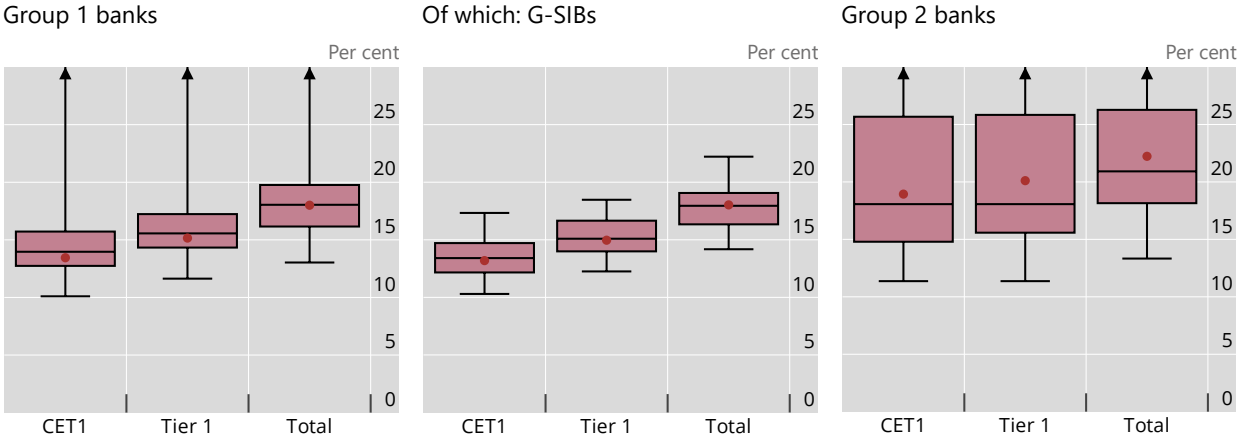
2.1 Risk-based capital ratios

For Group 1 banks, the current Basel III CET1 capital ratios range between 10.1% and 79.0%. The range is slightly decreasing when moving to current Basel III Tier 1 and total capital ratios, because the lower bound shows a marginal increase. Only considering the participating G-SIBs, the range is significantly more narrow from 10.3% to 17.3%. In contrast, Group 2 banks continue to show a similar dispersion as Group 1 banks. The current Basel III CET1 capital ratios range between 11.4% and 50.9%. This range is largely consistent for Tier 1 and total capital.

All banks report current Basel III CET1 capital ratios above 10%. More than 70% of Group 1 banks and almost 90% of Group 2 banks even exceed the 13% mark.

Current Basel III CET1, Tier 1 and total capital ratios[1]

Graph 13



[1] See Section 1.3.3 for details on box plots.

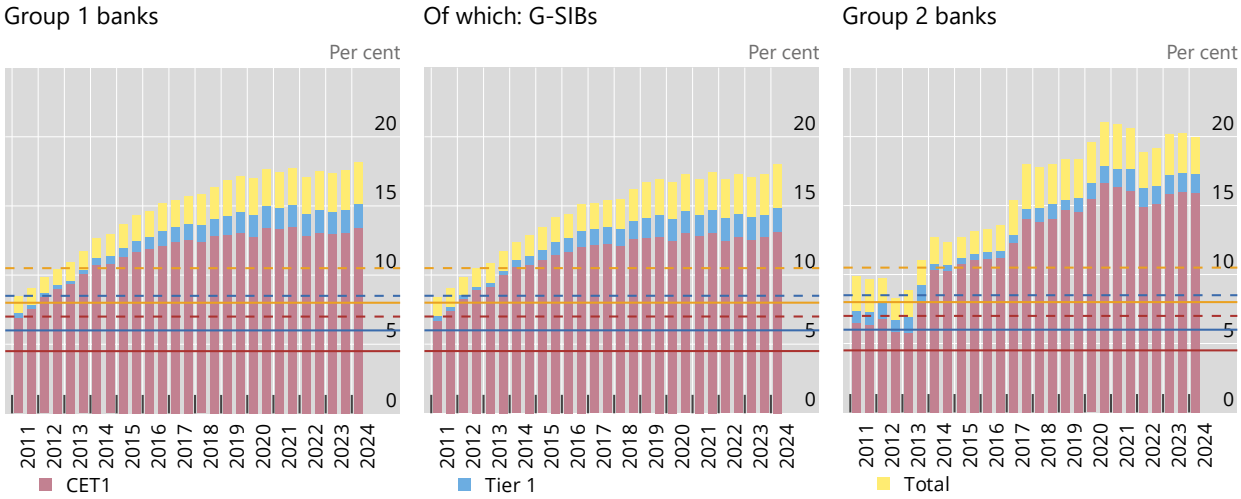
Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size. Worksheet "Graph 13a" provides additional information on the distribution of current Basel III capital ratios.

Capital ratios keep growing closer to their peak levels observed in 2021 for both Group 1 and Group 2 banks. Overall, capital levels remain high relative to the full historical reporting period that began in 2011. Compared with H2 2023, capital ratios increased during H1 2024. For Group 1 banks, total capital

ratios increased by 0.6 percentage points, while Group 2 banks showed a reduction in total capital ratios of 0.2 percentage points.

Initial Basel III CET1, Tier 1 and total capital ratios[1]

Balanced data set — Graph 14



[1] The graph shows the fully phased-in initial Basel III framework for the data points up to and including the end of 2018 and the actual framework in place at the reporting date for all data points thereafter.

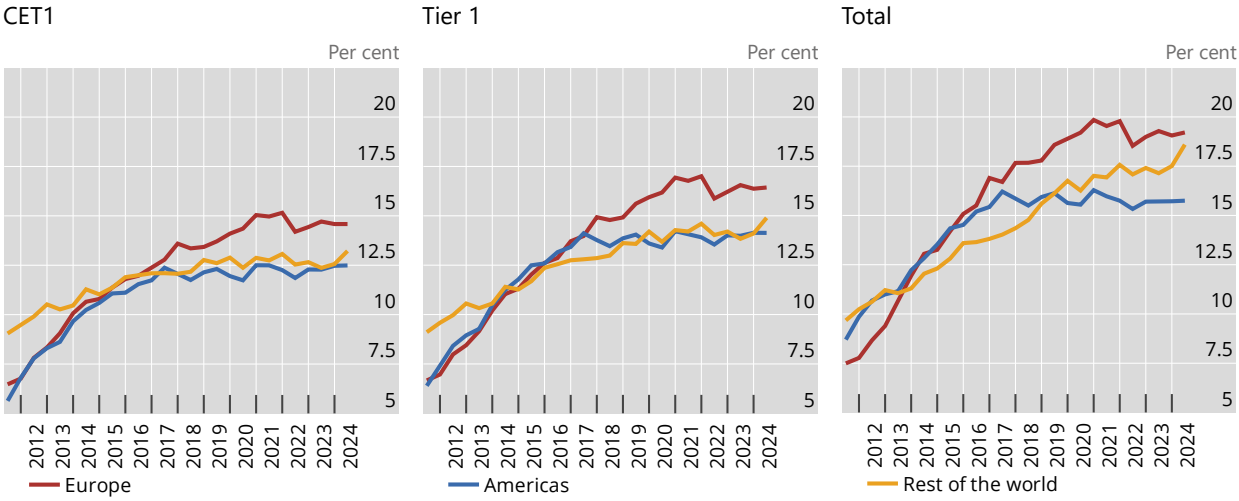
Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size. Note that the Excel file shows Tier 1 and total capital ratios as increments over the next lower Tier of capital.

In 2011, initial Basel III Tier 1 capital ratios were more than 1.5 percentage points lower in the Americas and in Europe than in the rest of the world region (Graph 15). Until around 2017, for European banks and banks in the Americas the capital ratios rose remarkably stronger than in the rest of the world. Consequently, the original relationship reversed around 2014, when these banks started reporting higher average capital ratios than banks in the rest of the world. In 2017, the growth of capital ratios in the Americas stopped, thus moving into line with the capital ratios in the rest of the world. Since then, European banks report the highest aggregated Tier 1 capital ratio.

Over H1 2024, capital ratios increased mainly in the rest of the world.

Initial Basel III CET1, Tier 1 and total capital ratios,[1] by region

Group 1 banks, balanced data set — Graph 15



[1] The graph shows the fully phased-in initial Basel III framework for the data points up to and including the end of 2018 and the actual framework in place at the reporting date for all data points thereafter.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size. Worksheet "Graph 15a" provides the same breakdown for G-SIBs.

The drivers of the changes in capital ratios are analysed in the "Risk-based capital requirements" dashboard on the Committee's website.[18] For this period, related data are still included in the Excel data file accompanying this report (see worksheet "Graph 15b" to "Graph 15c").

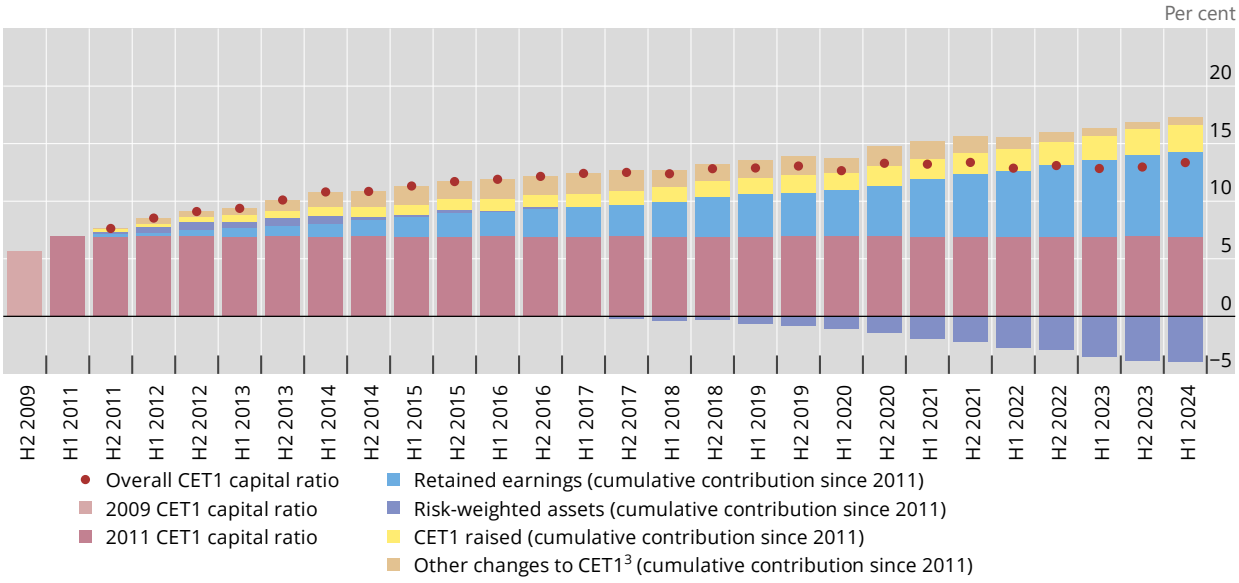
Graph 16 and Graph 17 below show the evolution of initial Basel III CET1 capital ratios and their drivers. Starting with the June 2011 CET1 capital ratio, the cumulative effect on the ratio of CET1 capital raised, retained earnings and other increases in CET1 capital (such as any reduction in regulatory adjustments) is added to the capital ratio. Furthermore, the impact of cumulative reductions in RWA has a positive impact on capital ratios, while the impact of cumulative increases in RWA is subtracted from the baseline capital ratio.

Overall, Graph 16 suggests that retained earnings were the by far most significant contributor to the improvements in CET1 capital ratios since 2011. A more detailed observation shows that the development and the main contributors are very heterogeneous across regions. Indeed, in Europe, the improvement of CET1 capital ratios stems mainly from a reduction in total RWA, whereas in the Americas, the main driver of strengthening the CET1 ratio is the category "Other changes to CET1". In contrast, in the rest of the world the different contributors to the CET1 capital ratio development counteract. While the negative cumulative impact of RWA continues to increase, the positive cumulative impact of retained earnings rose as well. In aggregate, CET1 capital ratios continued to modestly increase.

[18] www.bis.org/bcbs/dashboards.htm?m=99.

Evolution of initial Basel III CET1 capital ratios and their drivers[1]

Group 1 banks, balanced data set[2] Graph 16

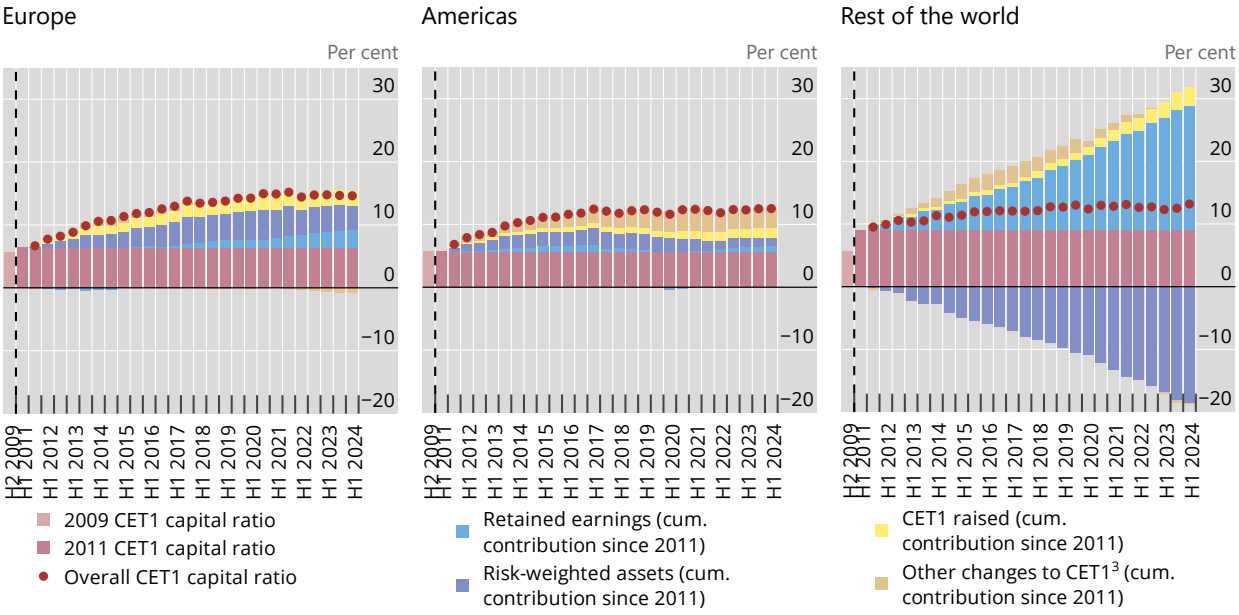


[1] The graph shows the fully phased-in initial Basel III framework for the data points up to and including the end of 2018 and the actual framework in place at the reporting date for all data points thereafter. [2] Except the ratio for H2 2009, which is based on the different sample of the Committee's comprehensive Quantitative Impact Study and therefore not fully comparable. [3] Other changes include changes in regulatory adjustments to CET1 capital and any other changes in CET1 capital between two reporting dates that are not reported separately.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Evolution of initial Basel III CET1 capital ratios and their drivers,[1] by region

Group 1 banks, balanced data set[2] Graph 17



[1] The graph shows the fully phased-in initial Basel III framework for the data points up to and including the end of 2018 and the actual framework in place at the reporting date for all data points thereafter. [2] Except the ratio for H2 2009, which is based on the different sample of the Committee's comprehensive Quantitative Impact Study and therefore not fully comparable. [3] Other changes include changes in regulatory adjustments to CET1 capital and any other changes in CET1 capital between two reporting dates that are not reported separately.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Related analyses for the fully phased-in final Basel III framework are no longer included in the PDF report as they are now available in the "Risk-based capital ratios" dashboard on the Committee's website.[19] For this period, related data are still included in the Excel data file accompanying this report (see worksheets "Graph 17a").

2.2 Impact of the final Basel III framework on minimum required capital

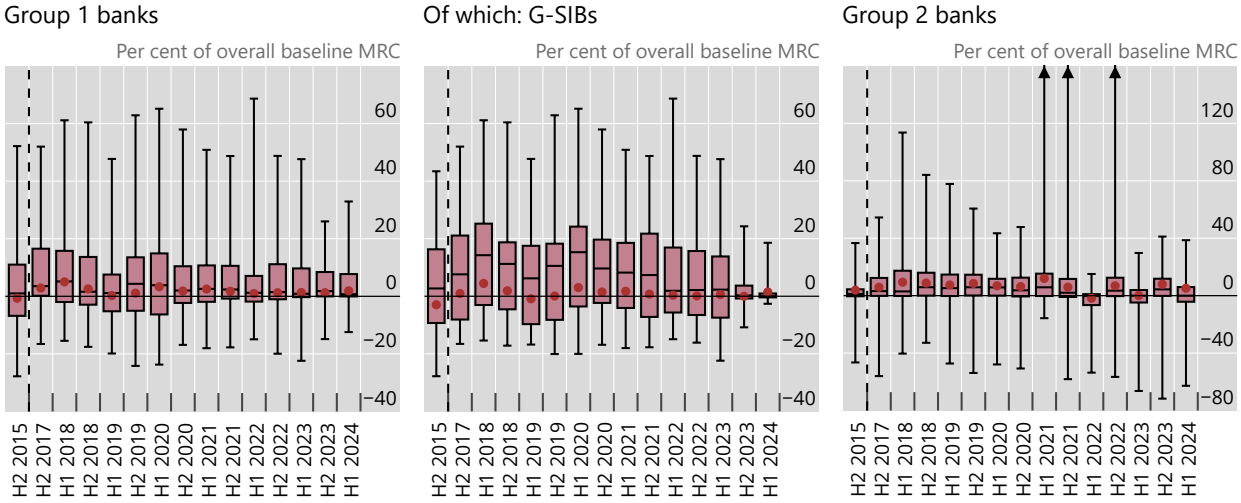
On average, Group 1 banks report a total change in Tier 1 MRC at the target level due to the final Basel III framework of 1.9%. The average Tier 1 MRC change for G-SIBs is lower (+1.5%). Compared with that, Group 2 banks show the strongest increase in Tier 1 MRC with 5.2% (see Table 4). In contrast to the results of the cumulative Quantitative Impact Study (CQIS),[20] these numbers include the impact of the amended minimum capital requirements for market risk published in January 2019 and the targeted revisions to the CVA framework in July 2020.

In more detail, Graph 18 depicts the dispersion of the MRC changes across Group 1 banks, G-SIBs and Group 2 banks in the sample. The change in MRC (including market risk and CVA) for the current period varies greatly and ranges between -0.1% and 7.7% for half of the Group 1 banks with a median of 0.7%. The distribution for half of G-SIBs ranges from -0.4% to 1.0%, while the dispersion for Group 2 banks is higher with the impact ranging from -4.2% to +6.0% for half of the banks.

The average impact of the Basel III framework on the Tier 1 MRC of Group 1 banks is 0.6 percentage points higher when compared with the 1.3% increase at end-December 2023.

Total change in Tier 1 MRC at the target level[1,2]

Unbalanced data set — Graph 18



[1] See Section 1.3.3 for details on box plots. [2] Results for H2 2015 are based on the Committee's cumulative Quantitative Impact Study and are not fully comparable from a methodological point of view, in particular since all changes from the revised market risk framework were already added to MRC under the current rules such that they were not reflected in the *change* in MRC. [3] Since the Committee did not collect the relevant data through its Basel III monitoring exercise for the end-June 2020 reporting date, results for H1 2020 use data from banks as of end-2019 and supervisory data for June 2020. Consequently, the change in MRC for the various risk types is kept constant from end-2019 to June 2020, but the basis on which these changes are calculated is updated for end-June 2020 based on supervisory data.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

[19] www.bis.org/bcbs/dashboards.htm?m=99.

[20] In the cumulative QIS, all changes from the revised market risk framework were already added to MRC under the current rules such that they were not reflected in the *change* in MRC.

The results are summarised in Table 4 and Graph 19 that include the following columns that provide an additional breakdown of the total change in MRC:

- *Total* shows overall changes in Tier 1 MRC, including the risk-based requirements (ie including output floors) and the Basel III leverage ratio.
- *Total: risk-based capital requirements* shows changes to the risk-based Tier 1 MRC (ie excluding the Basel III leverage ratio).
- *Credit risk* shows the change in Tier 1 MRC due to the revisions to the standardised and internal ratings-based (IRB) approaches for credit risk,[21] including the effect from migration of approaches[22] and changes to the securitisation framework.
- *CVA* shows the change in Tier 1 MRC due to the revisions to the CVA framework.[23]
- *Market risk* shows the change in Tier 1 MRC due to the revisions to the market risk framework.
- *Operational risk* shows the change in Tier 1 MRC due to the revisions to the operational risk standards.
- *Output floor* presents the change in the level of Tier 1 MRC due to the aggregate output floor when the total RWA fall below the threshold level of 72.5%. The impact is measured relative to the current national implementation of the Basel I-based transitional floor set out in the Basel II framework, as reported by member countries.
- *Other Pillar 1* presents the change in Tier 1 MRC due to changes to Pillar 1 requirements not specifically captured in the reporting template, including requirements by individual jurisdictions which are not based on a Basel Committee standard.
- *Leverage ratio* shows the change in Tier 1 MRC resulting from the changes to the Basel III leverage ratio framework. This captures the change in the definition of the Basel III leverage ratio exposure measure and the introduction of a G-SIB buffer on top of a 3% leverage ratio minimum which amounts to 50% of the surcharge on risk-based capital requirements. Note that increases to risk-based Tier 1 MRC and leverage ratio Tier 1 MRC do not add up, since the total MRC increases only to the extent the risk-based or leverage ratio requirement exceeds the other capital measure. Therefore, the leverage ratio column is adjusted to capture this effect (which can be positive or negative, even where the leverage ratio Tier 1 MRC remains unchanged). This results in an overall *incremental* leverage ratio change in MRC which can be either positive or negative. This mechanism is described in Box B.

  Note that from the H1 2023 reporting date some jurisdictions implemented the G-SIB buffer in their leverage ratio frameworks. This is reflected in the current MRC baseline, resulting in a lower leverage ratio impact compared to earlier periods.

Applying a fully phased-in definition of the final Basel III standards, Tier 1 MRC increase by 1.9% for Group 1 banks. This increase is composed of a 3.1% rise in the risk-based components, driven by the positive contributions of the output floor (+1.5%), market risk (+0.9%), credit risk (+0.7%) and CVA (+0.3%). The MRC increase is partially offset by the reduction in other Pillar 1 risk (-0.2%). The rise of the combined risk-based components is further offset by a negative effect of the leverage ratio Tier 1 MRC (-1.2%).

[21] The credit risk MRC impact since the end-December 2019 reporting date reflects the split between defaulted and non-defaulted assets in the treatment of EL amounts and provisions for those jurisdictions that require such a split. Because of this methodological change banks in these jurisdictions may show slightly increased credit risk MRC impacts. This is most pronounced for banks in the European regional breakdown since European Union rules require the aforementioned split.

[22] Migration of approaches refers to the application of a different approach for determining risk weights than the one currently used because of the revisions which remove certain modelling approaches for selected (sub-)asset classes.

[23] Targeted revisions to the revised CVA framework were published in July 2020. See Basel Committee on Banking Supervision, *Targeted revisions to the credit valuation adjustment risk framework, July 2020*, www.bis.org/bcbs/publ/d507.htm.

The impact on MRC is very heterogeneous across regions for Group 1 banks. European banks show the biggest increase in MRC (+4.0%), mostly driven by the output floor (+5.0%). In comparison, banks in the Americas report a more moderate increase in Tier 1 MRC amounting to 0.2%, because the impact of the leverage ratio and risk-based components counteract (+4.2% and -3.3%, respectively). For the rest of the world, MRC increases under the final Basel III framework by 1.7% mostly due to the output floor (+2.2%), which is partially the leverage ratio (-0.3%).

Group 2 banks report an MRC increase of 5.2%. The main drivers are credit risk (+4.9%) and the output floor (+4.4%). The leverage ratio has offset partially the increase in MRC by -4.3%.

Note that Group 1 and Group 2 bank samples are not directly comparable due to different business models and different regional distribution of the samples. The sample of Group 1 banks is strongly influenced by banks in the Americas and the rest of the world, whereas the sample of Group 2 banks is biased towards banks in Europe.

Changes in Tier 1 MRC at the target level due to the final Basel III standards

In per cent of overall basis MRC

Table 4

	Number of banks	Total	Risk-based requirements							Leverage ratio
			Total	Of which:						
				Credit risk[1]	CVA	Market risk	Op risk[2]	Output floor[3]	Other Pillar 1	
Group 1 banks	94	1.9	3.1	0.6	0.3	0.9	0.0	1.5	–0.2	–1.2
Of which: Europe	29	4.0	12.5	2.4	1.6	1.4	2.4	5.0	–0.2	–8.5
Of which: AM	17	0.2	–4.2	1.2	–0.6	1.2	–2.2	–3.3	–0.5	4.4
Of which: RW	48	1.7	2.0	–0.6	0.0	0.5	–0.1	2.2	0.0	–0.3
Of which: G-SIBs	27	1.5	2.6	1.0	0.3	0.8	–0.4	1.0	–0.1	–1.1
Group 2 banks	39	5.2	9.5	4.9	0.2	0.1	0.0	4.4	–0.1	–4.3

[1] Including securitisation. [2] Figures may not show supervisor-imposed capital add-ons under Pillar 2. Therefore, increases in MRC may be overstated and reductions may be understated. [3] Net of existing Basel I-based floor according to national implementation of the Basel II framework.

Source: Basel Committee on Banking Supervision.

Box B

Aggregation of changes in risk-based and leverage ratio MRC

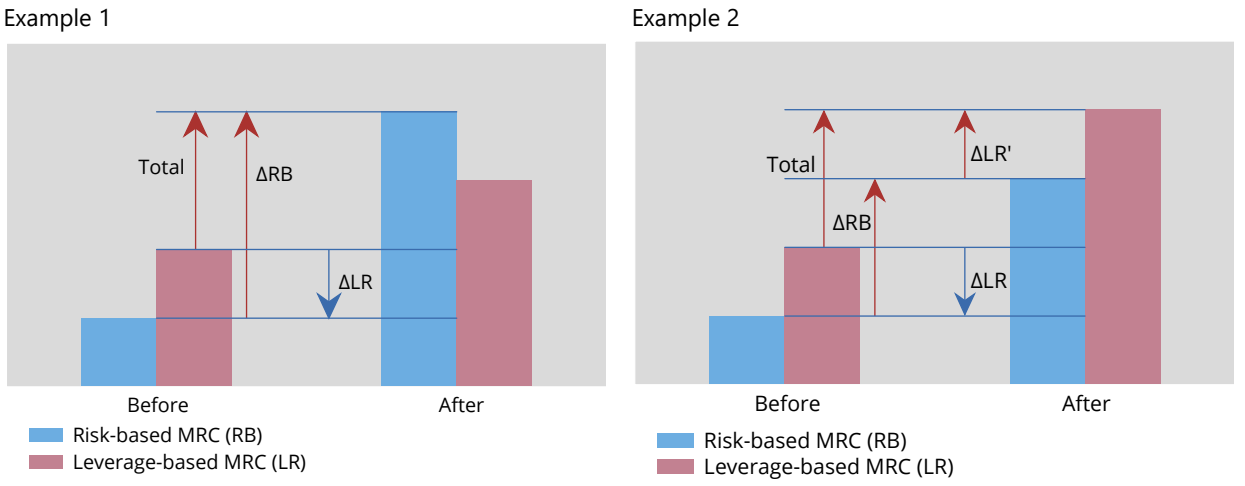
Example 1 shows an illustrative bank that is currently constrained① by the Basel III leverage ratio, resulting in an additional Tier 1 MRC. Under the revised framework, the additional requirement is instead "charged" by the risk-based Tier 1 MRC with the total change indicated by △RB. This replacement effect is represented as a negative effect in leverage ratio Tier 1 MRC to avoid double-counting, as shown by the blue arrow (△LR) in the diagram. Example 2 shows an alternative case where the bank is still constrained by the Basel III leverage ratio after the reforms. In this case, the contribution of the leverage ratio Tier 1 MRC is the net of (i) the additional leverage ratio Tier 1 MRC in the revised framework (△LR'); and (ii) the replacement effect captured by the risk-based Tier 1 MRC (△LR), which may be positive or negative.

Note that even for banks that already adopted the final leverage ratio standards (ie △LR'=0) there may be a non-zero contribution of the leverage ratio Tier 1 MRC, which is in this case equal to the replacement effect (△LR).

① A requirement is called constraining if it imposes the largest amount of MRC among the requirements under consideration (here risk-based and leverage ratio). A requirement is binding on a bank if the resulting MRC are higher than a bank's corresponding actual Basel III capital amounts.

Aggregation of changes in risk-based and leverage ratio MRC

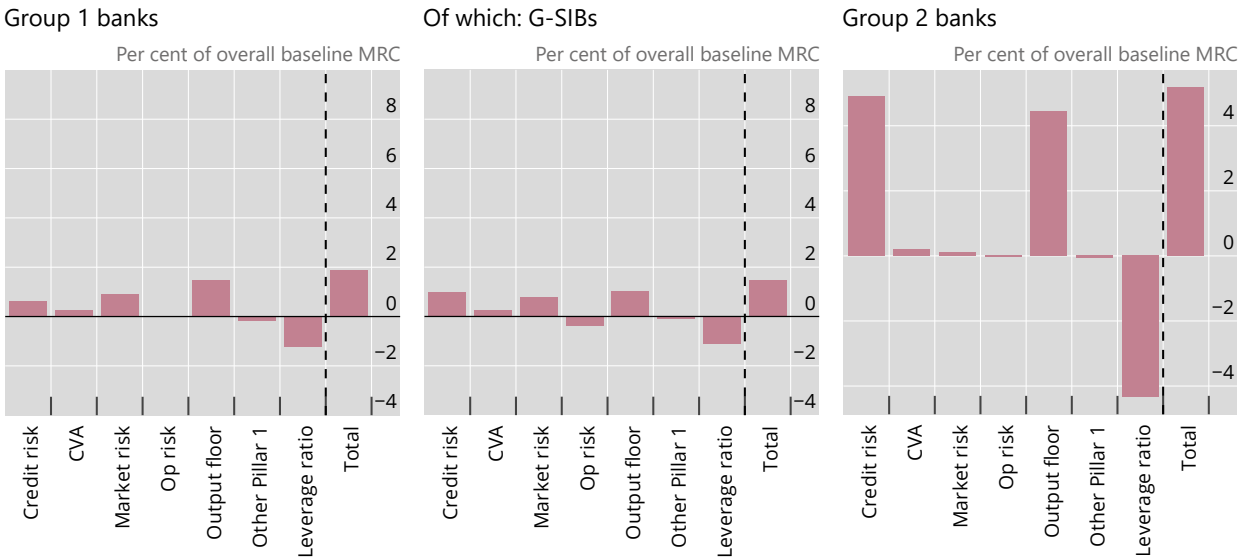
Graph A



Graph 19 displays the contributions of each MRC component relative to the current baseline for Group 1 banks, G-SIBs and Group 2 banks, respectively. The bars above (below) the horizontal line highlight the positive (negative) contributions induced by the different parts of the final Basel III framework, except for the rightmost bar that represents the total MRC impact. Graph 20 provides the regional breakdown for Group 1 banks.

Changes in Tier 1 MRC at the target level due to the final Basel III standards

Graph 19



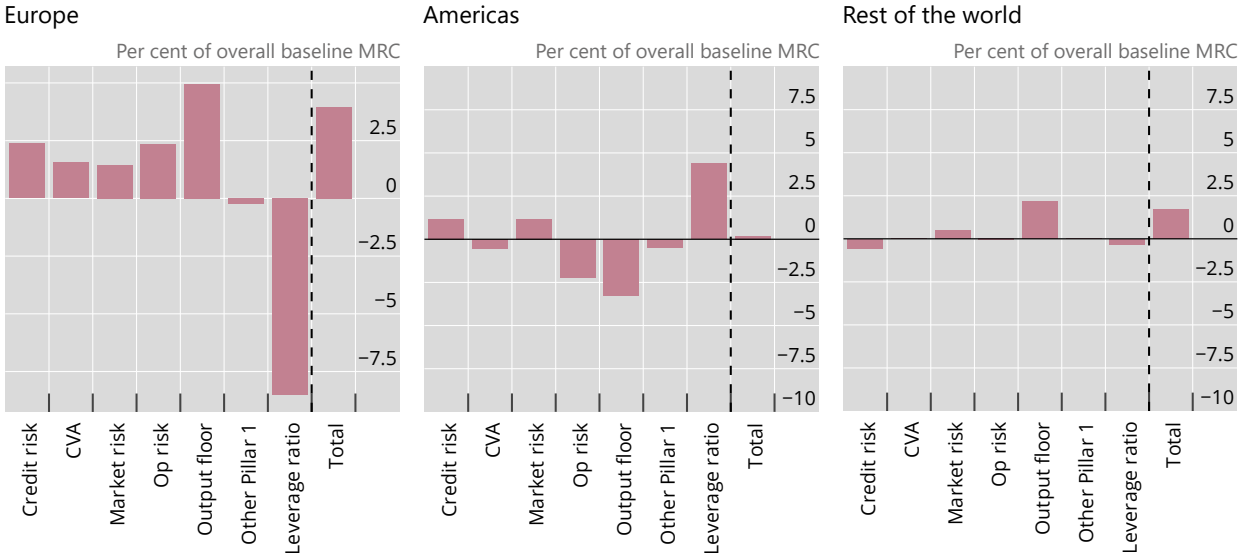
Credit risk includes securitisation. Operational risk figures may not show supervisor-imposed capital add-ons under Pillar 2. Therefore, increases in MRC may be overstated and reductions may be understated. Output floor results are net of the existing Basel I-based floor according to national implementation of the Basel II framework.

Source: Basel Committee on Banking Supervision.

Changes in Tier 1 MRC at the target level due to the final Basel III standards

Group 1 banks

Graph 20



Credit risk includes securitisation. Operational risk figures may not show supervisor-imposed capital add-ons under Pillar 2. Therefore, increases in MRC may be overstated and reductions may be understated. Output floor results are net of the existing Basel I-based floor according to national implementation of the Basel II framework.

Source: Basel Committee on Banking Supervision.

2.3 Leverage ratio

2.3.1 Overall results

The results regarding the Basel III leverage ratios are provided using the following measures for the numerator and the denominator:

- *numerator:* the numerator includes two alternative measures of Tier 1 capital:
  - *current Basel III Tier 1,* which is the Tier 1 capital eligible under the national implementation of the Basel III framework in place in member countries at the reporting date, including any phase-in arrangements; and
  - *fully phased-in final Basel III Tier 1*, which is the fully phased-in Basel III definition of Tier 1 capital, since 2019 under the relevant national implementation, without considering any transitional arrangements set out in the in the Basel III framework.
- *denominator:* the Basel III leverage ratio exposure measure is calculated on the basis of the 2014 or 2017 (final) definition as applicable (see box C). Also note that, contrary to Sections 2.2, 2.4, 2.5 and Section 5.2, throughout Section 2.3 temporary exclusions from the leverage ratio exposure measure in the context of Covid-19 have not been added back.

Box C

Basel III leverage ratio framework

Under the January 2014 and December 2017 versions of the Basel III leverage ratio framework,① the Basel III leverage ratio exposure measure (the denominator of the Basel III leverage ratio) includes:

- on-balance sheet assets, excluding securities financing transactions (SFTs) and derivatives;
- SFTs, with limited recognition of netting of cash receivables and cash payables with the same counterparty under strict criteria;
- derivative exposures at replacement cost (net of cash variation margin meeting a set of strict eligibility criteria) plus an add-on for potential future exposure;
- written credit derivative exposures at their effective notional amount (net of negative changes in fair value that have been incorporated into the calculation of Tier 1 capital) reduced by the effective notional amount of purchased credit derivatives that meet offsetting criteria related to reference name, level of seniority and maturity;
- off-balance sheet exposures, obtained by multiplying notional amounts by the credit conversion factors in the standardised approach to credit risk, subject to a floor of 10%; and
- other exposures as specified in the Basel III leverage ratio framework.

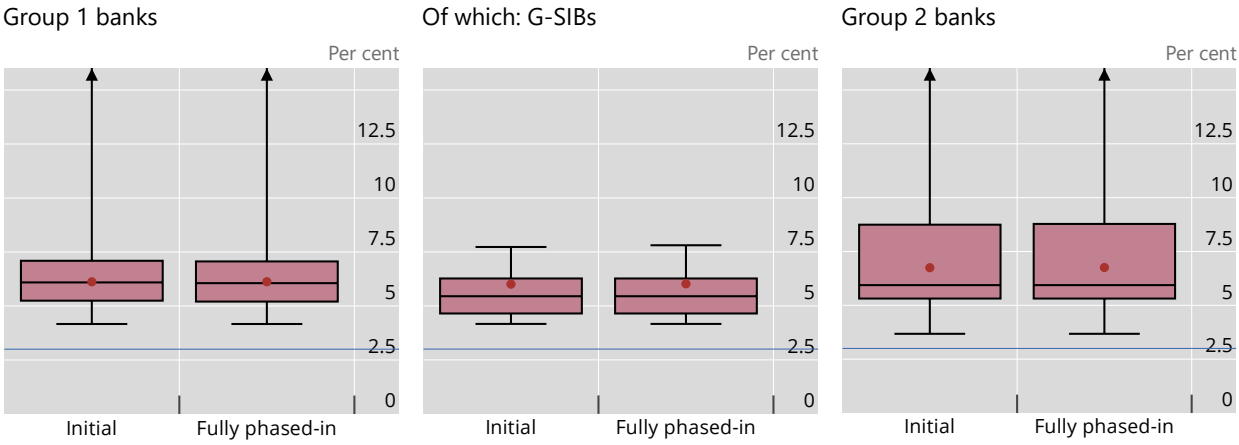
① Basel Committee on Banking Supervision, *Basel III leverage ratio framework and disclosure requirements*, January 2014, www.bis.org/publ/bcbs270.htm. The Committee agreed to revisions to the leverage ratio framework in December 2017, see Basel Committee on Banking Supervision, *Basel III: finalising post-crisis reforms*, December 2017, www.bis.org/bcbs/publ/d424.htm. Please note that this report does not consider the treatment of client cleared derivatives exposures as revised by the Committee in June 2019.

Graph 21 presents summary statistics related to the distribution of Basel III leverage ratios based on current and fully phased-in final Basel III Tier 1 capital for Group 1 banks, G-SIBs and Group 2 banks. The weighted average of the current and fully phased-in Basel III leverage ratios is 6.1% for Group 1 banks, 6.0% for G-SIBs, and 6.8% for Group 2 banks with only minimal differences between the two. When comparing across groups, Group 2 banks show a larger interquartile dispersion compared with Group 1 banks, whereas G-SIBs' leverage ratios are more concentrated.

The median fully phased-in final Basel III leverage ratio is 6.1% for Group 1 banks, 5.5% for G-SIBs and 5.9% for Group 2 banks, with all banks well above the 3% minimum

Current and fully phased-in final Basel III Tier 1 leverage ratios[1]

Graph 21



[1] See Section 1.3.3 for details on box plots. The blue line is set at 3% (minimum leverage ratio level).

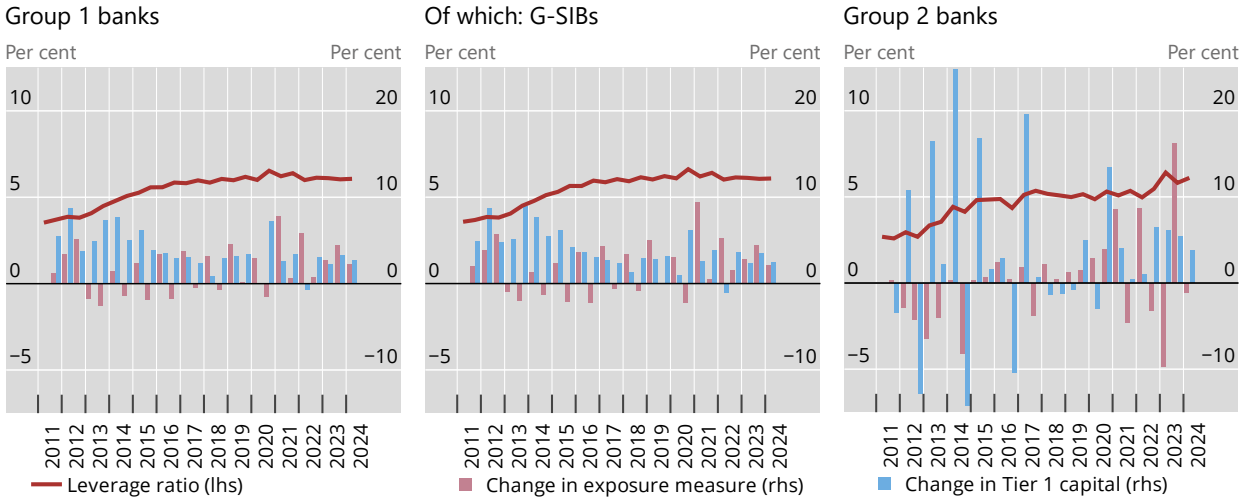
Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Graph 22 shows how the fully phased-in final Basel III leverage ratios have evolved over time for a balanced data set comprising leverage ratio data for all reporting dates from June 2011 to June 2024. For Group 1 banks and G-SIBs, the leverage ratio remained almost stable compared with end-December 2023. This is driven by increases in both the exposure measure and Tier 1 capital for Group 1 banks. For Group 2 banks an increase of the leverage ratio can be observed as of end of June 2024, which is driven by an increase in Tier 1 (3.8%) and a decrease in total exposure (-1.1%).

Graph 23 shows the same information as Graph 22, but for a balanced data set of Group 1 banks, grouped by region. Overall, the leverage ratio has been growing over the past twelve years for all regions, with Europe showing the strongest relative increase and the rest of the world showing the largest absolute increase. In the last period, the average leverage ratio increased slightly for banks in Europe and the rest of the world and decreased slightly for banks in the Americas. Leverage ratios continue to be lower in Europe (5.0%) compared with the Americas (5.8%) and the rest of the world (6.9%).

Fully phased-in final Basel III Tier 1 leverage ratios and component changes[1]

Balanced data set, exchange rates as at the current reporting date — Graph 22

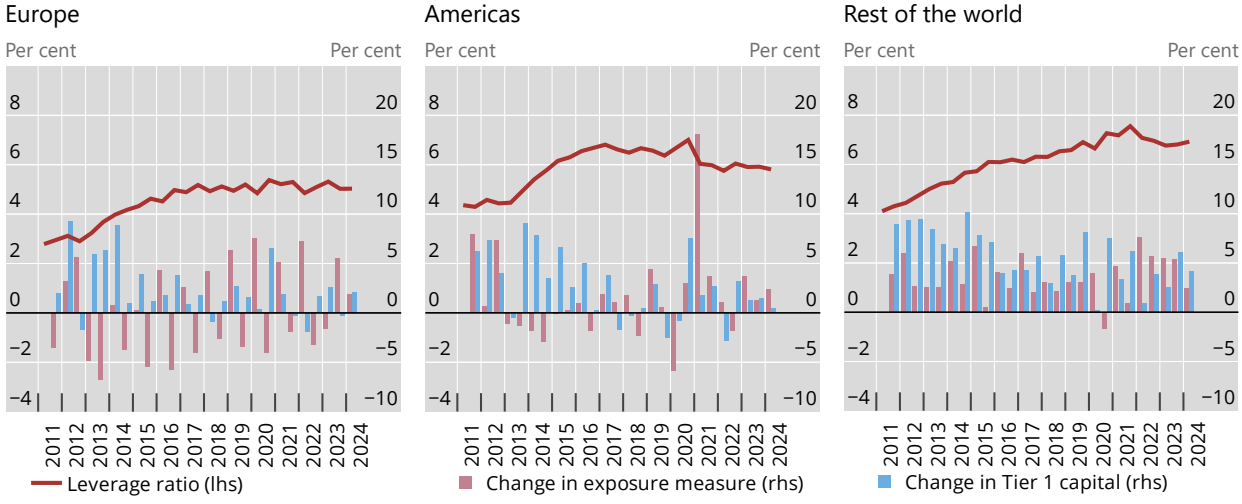


[1] Data points from H1 2011 to H2 2012 use the original definition of the leverage ratio. Data points from H1 2013 to H1 2017 use the definition of the leverage ratio set out in the 2014 version of the framework. Note that the data points for H1 2013 use an approximation for the initial definition of the Basel III leverage ratio exposure where gross instead of adjusted gross securities financing transaction values are used. Data points from H2 2017 onwards use the final definition of the leverage ratio to the extent data are available. Since the Committee did not collect the relevant data through its Basel III monitoring exercise for the end-June 2020 reporting date, the adjustment from initial to final leverage ratio exposure measure was calculated based on H2 2019 data.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Fully phased-in final Basel III Tier 1 leverage ratios and component changes,[1] by region

Group 1 banks, balanced data set, exchange rates as at the current reporting date — Graph 23



[1] See footnote 1 to Graph 22..

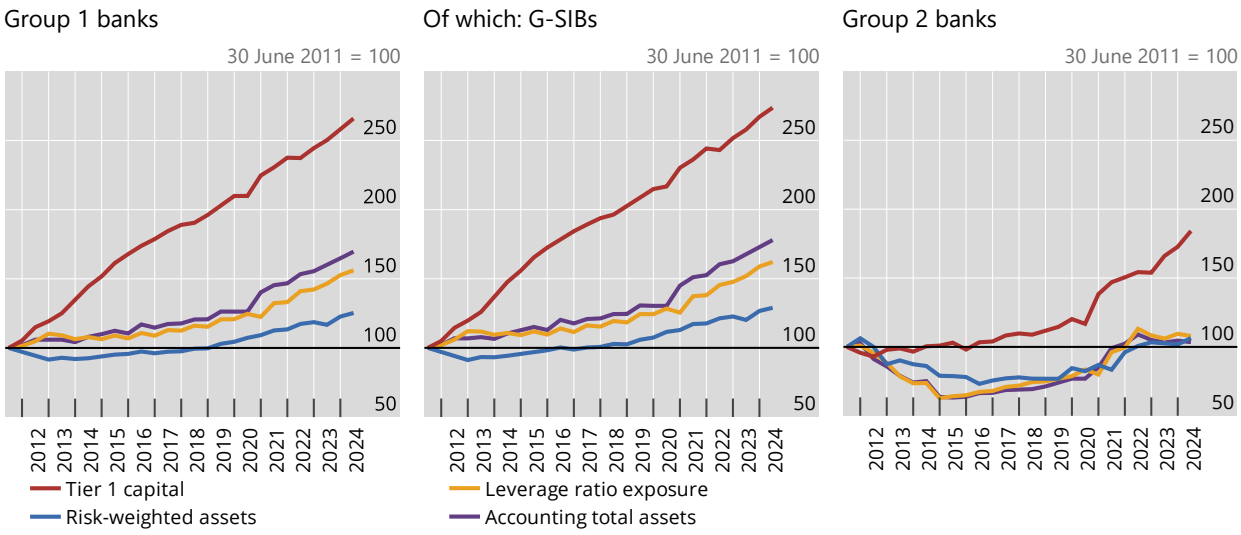
Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size. The "Leverage ratio" dashboard on the Committee's website provides the same breakdown for G-SIBs.

Graph 24 shows the evolution of key metrics of the risk-based capital and leverage ratios over time for a balanced data set, ie banks that have consistently provided the data since June 2011. The four key metrics are Basel III Tier 1 capital, RWA and the leverage ratio exposure measure, all assuming full implementation of Basel III, as well as accounting total assets. For Group 1 banks, all four key metrics increased steadily over the period. For Group 2 banks, Tier 1 capital increased substantially since end-December 2023, risk-weighted assets increased slightly, while the other two variables declined at a slow rate. For all four metrics there is a substantial increase since end-December 2019 for both Group 1 and Group 2 banks. For all banks, Tier 1 capital has increased at a much higher rate than risk-weighted assets, accounting assets and leverage ratio exposures over the entire observed period.

Graph 25 shows the same information for a balanced data set of Group 1 banks, grouped by region. While leverage exposures decreased from 2011 until 2016 for European Group 1 banks, remaining below the level of 2011 until December 2023 and increasing above it in the last two periods, banks in the Americas experienced a moderate increase, and exposure for Group 1 banks in the rest of the world have increased steadily since 2011.

Tier 1 capital, RWA, Basel III leverage ratio exposure and accounting total assets[1]

Balanced data set, exchange rates as at the current reporting date — Graph 24

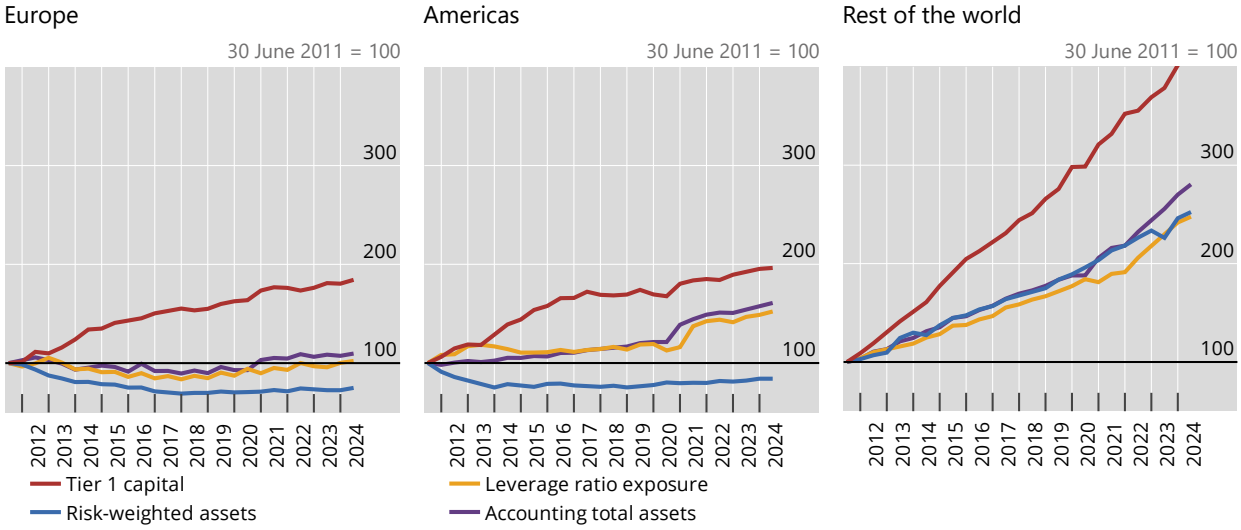


[1] Tier 1 capital, RWA and leverage ratio exposure assume full implementation of Basel III. Data points from H1 2010 to H2 2012 use the original definition of the leverage ratio. Data points from H1 2013 to H1 2017 use the definition of the leverage ratio set out in the 2014 version of the framework. Note that the data points for H1 2013 use an approximation for the initial definition of the Basel III leverage ratio exposure where gross instead of adjusted gross securities financing transaction values are used. Data points from H2 2017 onwards use the final definition of the leverage ratio to the extent data are available. Since the Committee did not collect the relevant data through its Basel III monitoring exercise for the end-June 2020 reporting date, the adjustment from initial to final leverage ratio exposure measure was calculated based on H2 2019 data, and accounting total assets are taken from end-2019 reporting.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Tier 1 capital, RWA, Basel III leverage ratio exposure and accounting total assets,[1] by region

Group 1 banks, balanced data set, exchange rates as at the current reporting date — Graph 25



[1] See footnote 1 to Graph 24..

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

2.3.2 Impact on Basel III leverage ratio MRC measure due to the final standards

Related graphs and explanations are no longer included in the PDF report as they are now available in the "Leverage ratio" dashboard on the Committee's website.[24] For this period, related data are still included in the Excel data file accompanying this report (see worksheet "Graph 25a").

2.4 Combined shortfall amounts under the final Basel III framework

Related graphs and explanations are no longer included in the PDF report as they are now available in the "High-level results and cumulative impact" dashboard on the Committee's website.[25] For this period, related data are still included in the Excel data file accompanying this report (see worksheet "Graph 25b").

2.5 Total loss-absorbing capacity requirements for G-SIBs

The Committee also collected data on additional total loss-absorbing capacity (TLAC) for G-SIBs. Related graphs and explanations are no longer included in the PDF report as they are now available in the "High-level results and cumulative impact" dashboard on the Committee's website.[26] For this period, related data are still included in the Excel data file accompanying this report (see worksheet "Graph 25c").

[24] www.bis.org/bcbs/dashboards.htm?m=99.

[25] www.bis.org/bcbs/dashboards.htm?m=99.

[26] www.bis.org/bcbs/dashboards.htm?m=99.

3. Level and composition of regulatory capital

Related graphs and explanations are no longer included in the PDF report as they are now available in the "Risk-based capital ratios dashboard" dashboard on the Committee's website.[27] For this period, related data are still included in the Excel data file accompanying this report (see worksheets "Graph 25d" to "Graph 25o").

4. Components and determinants of risk-based capital requirements

4.1 Share of different risk types in overall MRC under current rules

Graph 26 shows the evolution of the share of different asset classes in overall MRC for a balanced data set.[28] As of June 2024 and for a balanced data set of Group 1 banks, non-securitisation credit risk[29] continues to be the dominant portion of overall MRC, on average covering 73.2% of total MRC. However, the share of credit risk has declined significantly from 73.8% at end-June 2011 to its lowest share of 67.6% at end-December 2014 and since then increased to the level at the current reporting date. This trend was mainly driven by the MRC for retail (decreasing from 19.6% to 13.2% while the MRC for corporate exposures increase over the observed period from 31.0% at end-June 2011 to 34.0% at the current reporting date. The share of securitisations decreased from 7.4% to 2.7%.

The share of operational risk MRC for Group 1 banks increased sharply from 8.5% at the end of June 2011 to 17.3% at end-2018 and then decreased slightly to reach 15.0% at the current reporting date. The increase in the early 2010s was attributed in large part to the surge in the number and severity of operational risk events during and after the financial crises, which are factored into the calculation of MRC for operational risk under the advanced measurement approach. More recently, there is some "fading out" of the financial crisis losses so that in 2022, the lowest loss level of the past 10 years is observed. This explains the latest decrease in capital requirements especially for the banks heavily affected in the financial crisis. On the other hand, losses triggered by the Covid-19 pandemic did not have a significant impact on the loss severity level. The share of market risk is roughly constant around 5.0 % (4.7% in June 2024). The shares of "other" risk has been somewhat stable in recent years at around 1% while the share of floor requirements decreased to 2.1% in the current reporting period.

For Group 2 banks, the drop in overall MRC in the second half of 2017 as well as the drop in the share of floors is due to a change in the Basel I floor reporting approach in several countries.

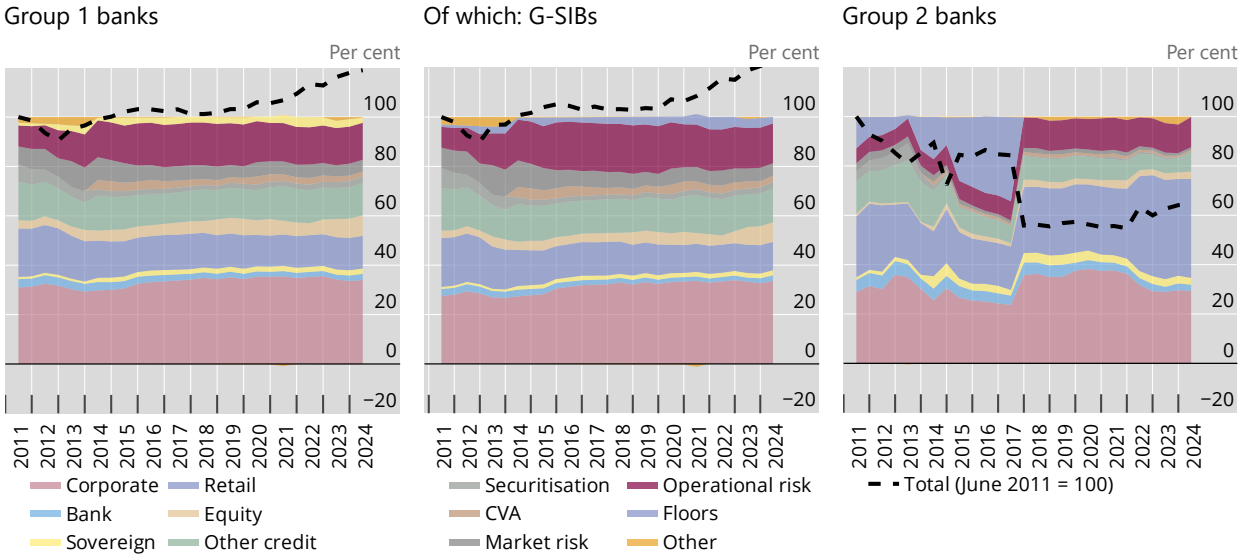
[27] www.bis.org/bcbs/dashboards.htm?m=99.

[28] MRC figures in this section are based on the total capital ratio, ie 8% of RWAs. Where applicable, MRCs under the initial Basel III framework reflect the effect of the 1.06 scaling factor applied to IRB credit RWA, and deductions assigned to the securitisation and related entities asset classes.

[29] Here non-securitisation credit risk is defined as the sum of corporate, bank, sovereign, retail, equity and other credit as illustrated in the graph.

Share of MRC by asset class[1] according to current rules

Balanced data set — Graph 26



[1] "Other credit" includes exposures subject to partial use of the standardised approach for credit risk that cannot be assigned to a specific asset class; past-due items under the standardised approach; capital requirements specified in Part 1 of the Basel II framework; capital requirements for other assets; and additional capital requirements due to regulatory calculation differences if there is a shortfall of provisions over expected loss amounts for exposures subject to the IRB approach for credit risk. The category "other" includes Pillar 1 capital requirements in member countries for risks not covered by the Basel framework; and reconciliation differences (ie shortfall of provisions over expected loss amounts for exposures subject to the IRB approach for credit risk). The term "reconciliation differences" refers to the difference between MRC reported at the entire bank level and the sum of MRC reported for the individual asset classes.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Table 5 provides data on relative sizes of asset classes in terms of exposures as well as MRC for both Group 1 and Group 2 banks according to current rules at the reporting date. The sample differs considerably from the balanced data set used for the time series above, resulting in differences for the values at the reporting date. The average risk weight suggests the relative riskiness of the different asset classes as measured by the current rules. Both the numerator (RWA) and the denominator (exposure amounts) of this ratio include exposures under the IRB and standardised approaches for credit risk.[30] Since a common exposure measure for credit, market and operational risk does not exist, the size in terms of exposure and the average risk weight are only defined for asset classes subject to a credit risk treatment.

Looking at Group 1 banks, corporate exposures are the biggest in size with 31.2% of total exposures and 39.0% of MRC; they attract a 55.8% risk weight. Retail and sovereign asset classes represent almost half of exposures although a small share of MRC as they have a low-risk density and an average risk weight at 29.4% and 5.1% respectively. For Group 2 banks, retail and sovereign asset classes comprise more than 60% of exposures, corporates represent 18.1% adding up to 80.2% of the total. Group 2 banks' average risk weight for overall credit risk is lower by 6.5 percentage points at 29.4% versus 35.9% for Group 1 banks. This is largely driven by Group 2 banks' lower average risk weights for sovereign and retail exposures and the higher share of these exposures on their balance sheets.

[30] The asset classification is mainly based on the IRB approach. Exposures subject to partial use of the standardised approach for credit risk which cannot be assigned to a specific asset class, are listed separately in Table 5.

Average asset class/risk type size and average risk weight[1]

In per cent

Table 5

	Group 1			Group 2		
	Size exposure	Size MRC	Average risk weight	Size exposure	Size MRC	Average risk weight
Credit risk; of which:	97.4	78.8	35.9	99.3	84.0	29.2
Sovereign	23.6	2.8	5.1	31.4	3.0	3.4
Bank	6.6	3.9	26.9	9.4	5.4	19.8
Corporate	31.2	39.0	55.8	18.1	32.7	64.6
Equity	1.4	15.7	20.4	1.4	22.3	25.9
Retail	23.7	5.0	29.4	30.7	6.3	24.5
Non-res./other real estate	0.4	0.7	61.5	3.2	3.9	46.7
Purchased receivables	0.1	0.1	28.2	0.0	0.0	56.2
Defaulted exposures	0.1	0.2	106.7	0.2	0.6	100.7
Failed trades and non-DVP transactions	0.0	0.0	116.5	0.0	0.0	
Other assets	4.0	4.5	47.9	1.9	3.0	51.2
Trading book CCR[4]	0.1	0.1	50.2	0.0	0.0	15.5
CCPs	1.1	0.2	7.7	0.0	0.1	43.6
Not assigned[2]	4.9	6.3	58.2	3.0	5.8	67.0
Regulatory difference[3]		0.3			0.8	
Securitisation	2.6	1.4	21.4	0.7	0.5	20.6
CVA	0.0	1.2		0.0	0.7	
Market risk		3.4			1.8	
Other trading book[4]		0.2			0.5	
Operational risk		12.0			11.0	
Floor adjustment		1.0			0.0	
Other[5]		2.2			1.9	
Total	100.0	100.0	35.9	100.0	100.0	29.4

[1] MRC figures in this table are based on the Tier 1 target capital ratio. Average risk weights exclude certain securitisation exposures that are subject to a deduction treatment. [2] The "not assigned" asset class only includes those exposures subject to partial use of the standardised approach that could not be assigned to one of the other asset classes. [3] Includes shortfall (positive) or excess (negative) of provisions over expected loss amounts for exposures subject to the IRB approach for credit risk as well as general provisions (negative) for exposures subject to the standardised approach for credit risk to the extent they are recognised in Tier 2 capital. [4] Counterparty credit risk in the trading book. [5] Includes the reconciliation asset class and other Pillar 1 capital requirements.

Source: Basel Committee on Banking Supervision.

4.2 Credit risk

Graphs and explanations related to credit risk including securitisations are no longer included in the PDF report as they are now available in dashboards on the Committee's website.[31] For this period, related data are still included in the Excel data file accompanying this report (see worksheets "Graph 26a" to "Graph 26q").

[31] www.bis.org/bcbs/dashboards.htm?m=99.

4.3 Counterparty credit risk and credit valuation adjustment risk

4.3.1 Counterparty credit risk

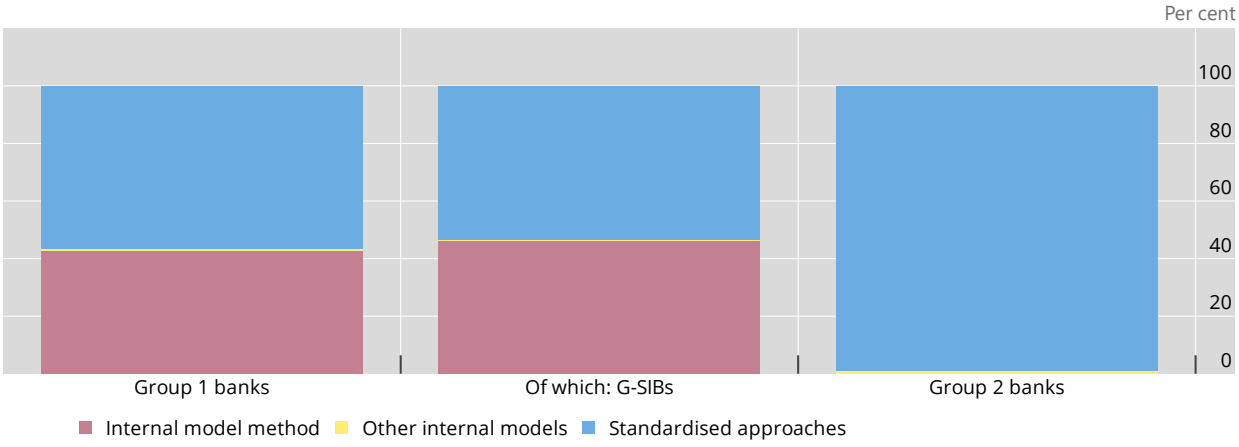
In understanding overall MRC, counterparty credit risk (CCR) is part of credit risk capital requirements. This section provides detailed analysis of the current and revised counterparty credit risk capital requirements.

Current rules for counterparty credit risk

Graph 27 shows the relative composition of counterparty credit risk capital requirements by exposure calculation approach per bank group at end-June 2024. A significant number of banks in the sample use standardised approaches (SA) to calculate CCR exposures. Amongst them, the SA-CCR is the most widely used as a considerable number of jurisdictions have already implemented this new approach for calculating SA exposures for derivatives, such as the European Union (as of end of June 2021), Canada and the United States (as of June 2022). A large number of Group 1 banks use the internal model approach, mainly the internal model method (IMM), to calculate CCR exposures for derivatives and securities financing transactions (SFTs). Group 2 banks do not apply the IMM and instead almost exclusively use standardised approaches to calculate CCR exposures. As of end-June 2024, for the 40 Group 1 banks in the sample (of which 17 are using the IMM), CCR IMM capital requirements contribute 42.9% to total CCR capital requirements. CCR capital requirements calculated using standardised approaches contribute 56.6% for these banks. For G-SIBs, 46.0% of total CCR capital requirements stem from capital requirements calculated using the IMM. Other internal model methods (Repo-VaR and the comprehensive approach using own estimates of haircuts) are generally used for smaller portion of exposures (0.5% for Group 1 banks).

Contribution to current CCR capital requirements by approach to EAD calculation

All banks Graph 27



Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Overall impact of the revised minimum capital requirements for counterparty credit risk

This section shows the estimated impacts from the introduction of the revised minimum capital requirements for counterparty credit risk. It reflects changes to the exposure calculation methodologies, with the introduction of the standardised approach for counterparty credit risk (SA-CCR) published in March 2014, the amendments to the comprehensive approach using supervisory haircuts (CA(SH)) and the removal of the comprehensive approach using own estimates of haircuts (CA(OE)), published in December 2017. In addition, CCR capital requirements are affected by the changes to the credit risk framework that impact the risk weights applied to CCR exposures. Both changes to the framework contribute to the impact

of CCR capital requirements. Generally, these changes lead to an increase in CCR capital requirements under the revised framework relative to the current rules but in some cases, the impact is negative. For some banks, the impact from changes in exposure and risk weight calculations offset each other so that the overall impact is neutral.

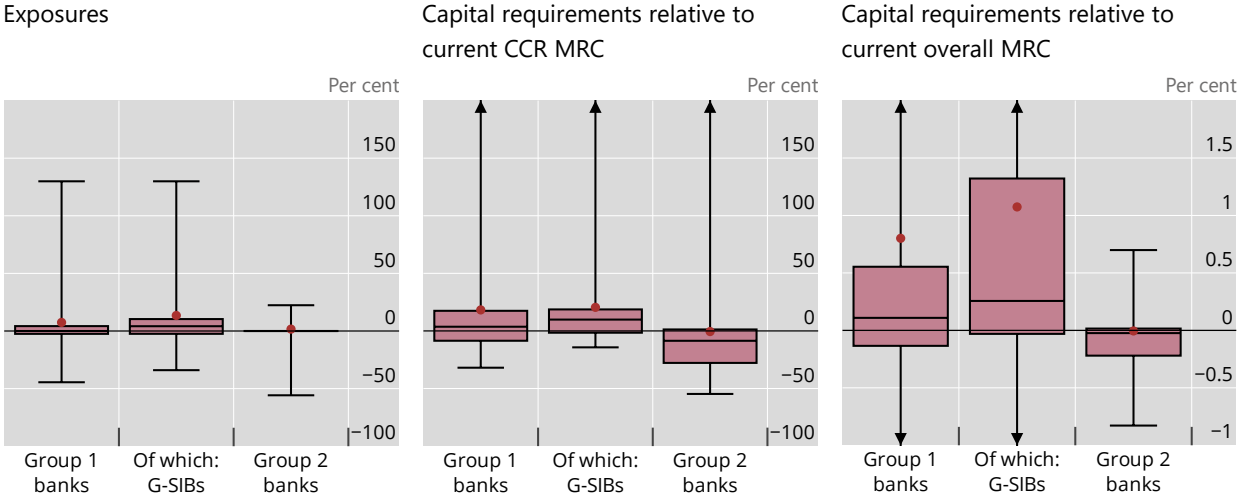
A total of 66 banks, including 40 Group 1 banks, of which 13 G-SIBs, and 26 Group 2 banks are included in the analyses regarding the revised minimum capital requirements for counterparty credit risk for the end-June 2024 reporting date. It should be noted that for this exercise some single jurisdictions chose to submit data via supervisory reporting because they have implemented the revised CCR framework at the reporting date.

The centre panel of Graph 28 shows the impact on CCR capital requirements from the introduction of the revised CCR framework compared with the current CCR MRC. Capital requirements for Group 1 banks and G-SIBs exhibit an average increase of 18.2% and 20.5%, respectively. The average decrease for Group 2 banks is 0.6%, compared with –5.8% at end-June 2023. The decrease is attributable to the better reflection of margin agreements under the SA-CCR and, if compared with results from earlier exercises to the implementation of the SA-CCR under the current rule in the European Union and other jurisdictions, such as the United States resulting in zero exposure impacts between current and revised framework for derivatives under SA-CCR. The right-hand panel of Graph 28 displays the impact of the CCR revisions on current overall MRC. Group 1 banks and G-SIBs show an average increase of 0.8% and 1.1%, while the average impact observed for Group 2 banks is neutral with 0%.

The left-hand panel of Graph 28 shows the impact on CCR exposures of the revised CCR framework relative to the current framework. CCR exposures increase on average by 7.5% for Group 1 banks in the sample. The average impact is higher for the subsample of G-SIBs (13.5%), however for Group 2 banks the CCR exposures increased by only 1.6% on average. Group 2 banks show a lower impact on exposures than Group 1 banks, likely due to the adoption of the SA-CCR methodology in the European Union since most of the Group 2 banks are European banks. For the median banks in Groups 1 and 2 there is no change in CCR exposures, while for the median G-SIB, a slight increase of 4.2% is observed.

Impact of revised CCR standards relative to current rules[1]

All banks — Graph 28



[1] See Section 1.3.3 for details on box plots.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

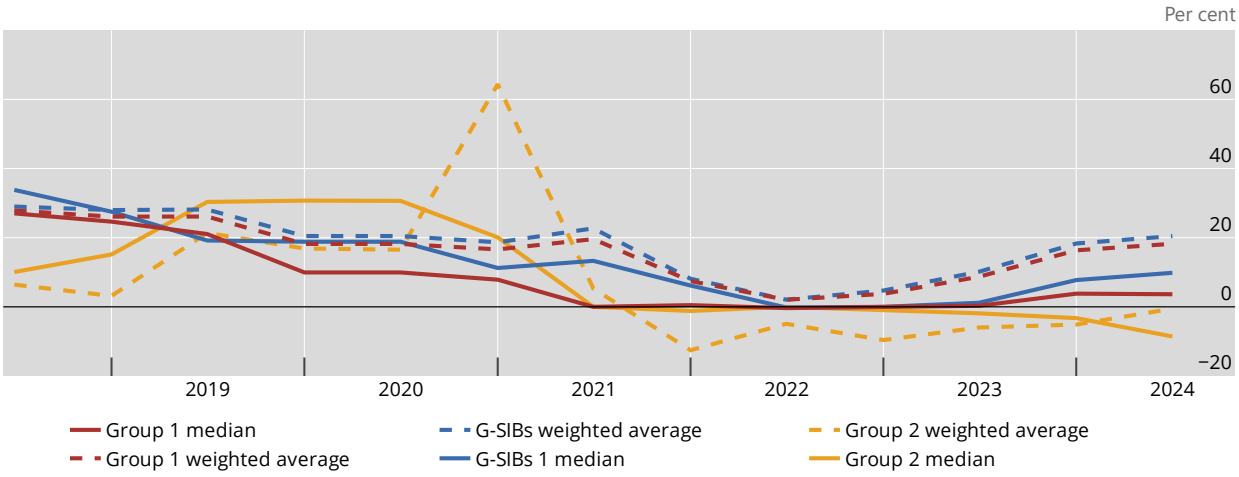
One of the factors that drive the change between the current SAs and SA-CCR exposures for derivatives includes the treatment of margin collateral under the current rules (ie CEM or SM). For few

banks which still use CEM under the current framework, SA-CCR exposure decreases significantly (sometimes leading to SA-CCR exposure and consequently capital requirements being close to zero) when banks account for margin collateral under SA-CCR. Also, changes to the supervisory haircuts for SFT exposures as well as the minimum haircut floors influence the exposures. Changes in the credit risk framework can amplify these impacts.

Graph 29 shows the average and median impacts of the revised CCR capital requirements relative to the current ones for an unbalanced data set of Group 1 banks, G-SIBs and Group 2 banks. The average impact for Group 1 banks increased slightly from 16.4% to 18.2% compared with last period. The same trend is observed for G-SIBs, for which the impact increased from 18.3% to 20.5%. Also, Group 2 banks show an increasing effect from a decrease in impact by 5.1% last period to a decrease of 0.6% in the mid-2024 exercise. The estimated impact of the changes to the framework is more volatile for Group 2 banks than for Group 1 banks and G-SIBs.

Impact of total revised CCR capital requirements relative to current across time

Unbalanced data set — Graph 29



Since the Committee did not collect these data through its Basel III monitoring exercise for the end-June 2020 reporting date, results for H1 2020 show the same values as for H2 2019.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

4.3.2 Credit valuation adjustment risk

Current rules for credit valuation adjustment risk

The sample for the analysis of the CVA risk component consists of 69 banks, including 46 Group 1 banks, of which 18 G-SIBs, and 23 Group 2 banks.

The left-hand side of Graph 30 shows the average share of CVA capital requirements in total MRC. For 75% of the Group 1 banks this share is 3.1% or less, for the Group 2 banks 75% of the banks have a CVA share of at most 1.0% in total MRC. The maximum share is 7.7% for Group 1 banks and 3.9% for Group 2 banks, respectively.

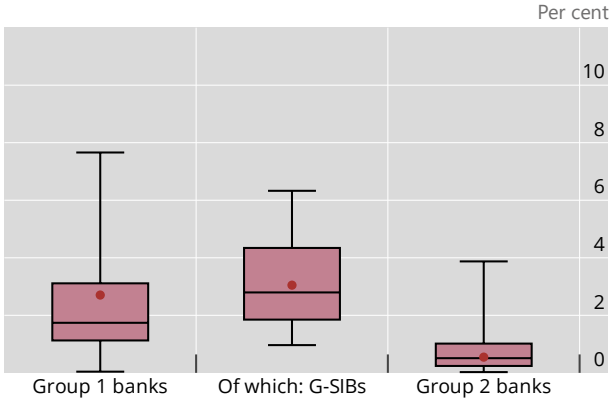
The right-hand side of Graph 31 displays for an unbalanced data set the average share of current CVA capital requirements relative to total MRC over time. It shows that G-SIBs recently report the highest average share; the average share for Group 1 banks is a bit lower. The peak for the end-December 2020 data for Group 1 banks was due to an increase in absolute CVA capital requirements, driving the increase of the relative share of CVA capital requirements in the total MRC. Since then, decreasing CVA capital requirements resulted in a lower share of CVA capital requirements in total MRC. Only recently the share

increases to 2.7% for Group 1 banks at the end-June 2024 reporting date. For Group 2 banks, the peak at end-December 2021 could possibly be attributed to a sharp increase in the number of participating banks, and hence due to banks with a higher share of CVA capital requirements that did not participate in the half-year exercises. Similar peaks are observed for the end-December 2022 and end-December 2023 exercises.

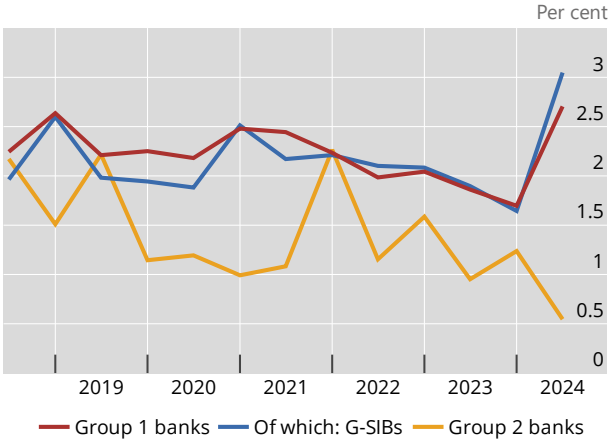
Share of CVA capital requirements in total MRC under the current rules

Unbalanced data set — Graph 30

Distribution by bank group[1]



Development over time



[1] See Section 1.3.3 for details on box plots.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Overall impact of the revised minimum capital requirements for credit valuation adjustment risk

This section discusses the estimated impacts from the introduction of the revised minimum capital requirements for CVA risk including the targeted revisions to the framework published in July 2020.[32]

The sample includes 16 banks that currently apply the advanced method for CVA (A-CVA), of which 11 indicate to use the standardised approach for CVA (SA-CVA) under the revised framework. The other five banks indicate to be using the reduced and full BA-CVA under the revised framework, respectively. The 53 banks that currently apply only the standard method for CVA (S-CVA) include seven banks that indicate to intend to apply the SA-CVA and 38 banks that indicate to move to the reduced basic approach for CVA (reduced BA-CVA) [33] under the revised framework. Overall, 12 banks in the sample indicate to use only the full basic approach for CVA (full BA-CVA) in the future.

The left-hand side panel of Graph 31 shows that the average impact when moving to the revised CVA framework in relation to current CVA MRC is a decrease by 3.3% for Group 1 banks. Group 2 banks report a much higher average impact with an increase of up to 33.7%. This higher average and median impact for Group 2 banks is attributable to the relatively more conservative calibration of the reduced BA-CVA approach that is employed by most Group 2 banks compared with the full BA-CVA, which allows for hedging, as does the SA-CVA. The average impact reported by G-SIBs is close to the one of Group 1 banks

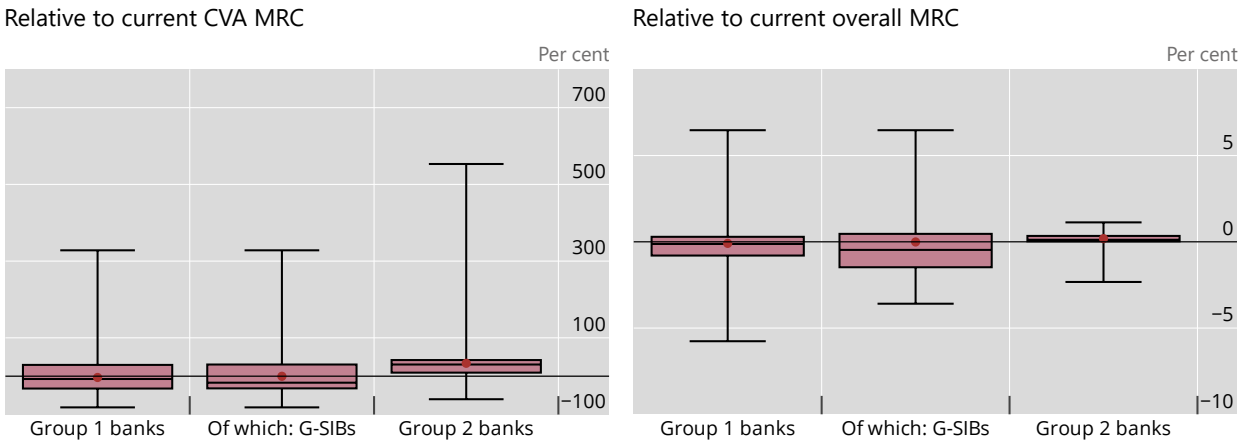
[32] See Basel Committee on Banking Supervision, *Targeted revisions to the credit valuation adjustment risk framework,* July 2020, www.bis.org/bcbs/publ/d507.htm.

[33] Of these banks, 14 are eligible and willing to use CCR MRC for the calculation of revised CVA MRC, but also provided reduced BA-CVA figures.

with an average decrease of 0.3%. Group 2 banks show the largest variety in impacts ranging from a decrease of 60.1% to an increase of 553.2% relative to the current CVA risk capital requirements.

The right-hand side panel of Graph 31 provides the impact of the revised CVA capital requirements relative to current overall MRC. Given the small share of CVA capital requirements in overall MRC for most banks, the average impact of the CVA revisions on overall MRC is -0.1% for Group 1 and 0.2% for Group 2 banks. Overall, the impact ranges between -5.8% and 6.5% for all banks in the sample.

Impact of revised CVA capital requirements compared with current rules[1] Graph 31



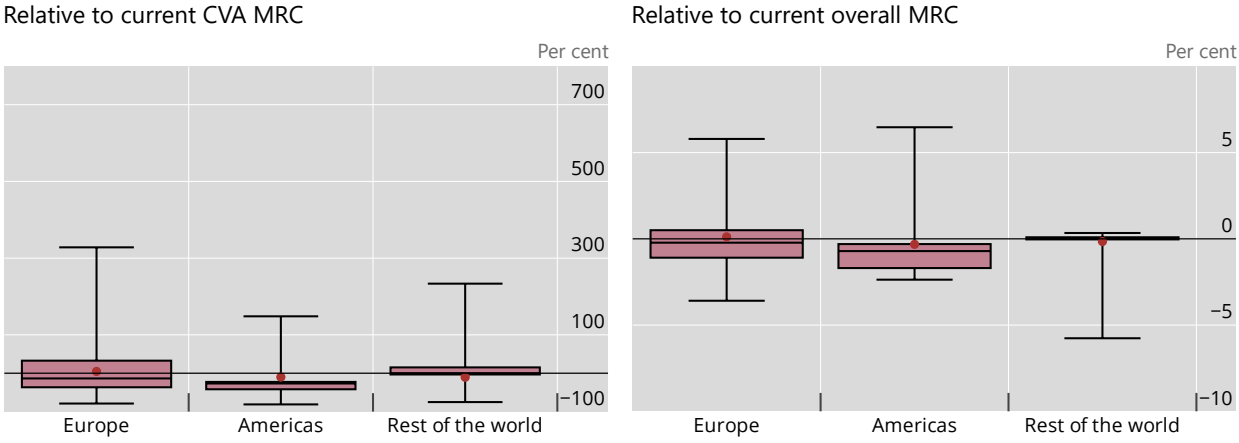
[1] See Section 1.3.3 for details on box plots.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Graph 32 shows based on the sample of Group 1 banks that results differ across regions: The average impacts to current CVA MRC are 4.6% for Europe, -10.1% for the Americas and -10.6% for the rest of the world. Europe shows the highest variability with a range between -79.0% and 328.2%. In some countries, all banks show comparable impacts, and in others, large increases due to the differences in the methodology between the current and revised CVA frameworks can be observed. The average impact of the revised CVA capital requirements relative to current overall MRC demonstrates a slightly increasing impact of 0.1% for Europe, a slightly decreasing impact of -0.3% for the Americas and -0.2% for the rest of the world.

Impact of revised CVA capital requirements compared with current rules, by region[1]

Group 1 banks — Graph 32



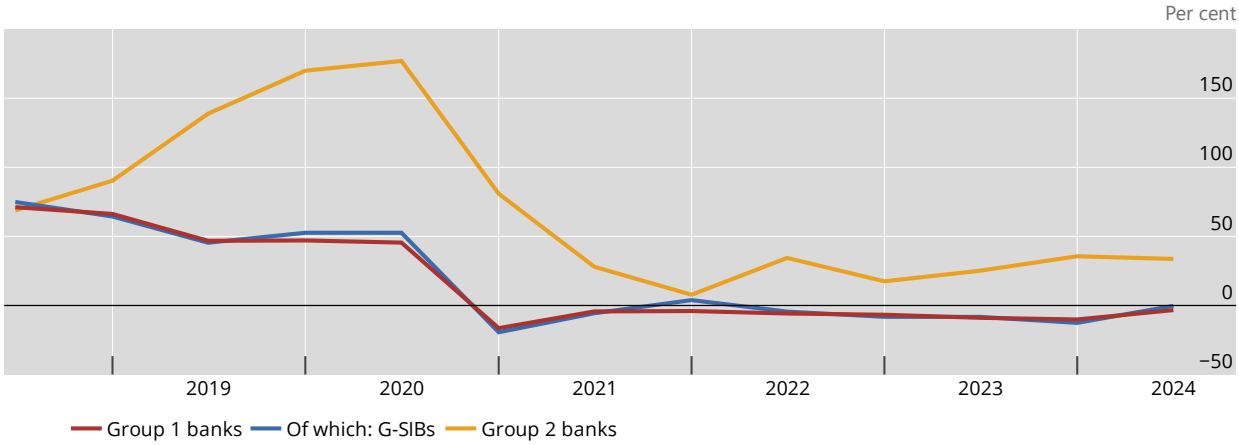
One bank in the sample provided CVA data but no data on current overall capital requirements. It is therefore excluded from the right-hand panel. [1] See Section 1.3.3 for details on box plots.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

For an unbalanced data set, the average impacts of the revised CVA capital requirements relative to current are displayed in Graph 33 starting with end-June 2018 Basel III monitoring data. All bank groups show a large drop in the impacts for end-December 2020. This drop in average CVA capital requirements is attributable to the final revisions to revised CVA framework that had to be applied by banks the first time for that exercise. Group 1 banks and G-SIBs benefit on average more from the amendments than Group 2 banks. Since then, impacts have stabilised and especially for Group 1 banks and G-SIBs seem to be unaffected by the sample composition.

Impact of total revised CVA capital requirements relative to current across time

Unbalanced data set — Graph 33



Since the Committee did not collect these data through its Basel III monitoring exercise for the end-June 2020 reporting date, results for H1 2020 show the same values as for H2 2019.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

4.4 Market risk

4.4.1 Current market risk rules

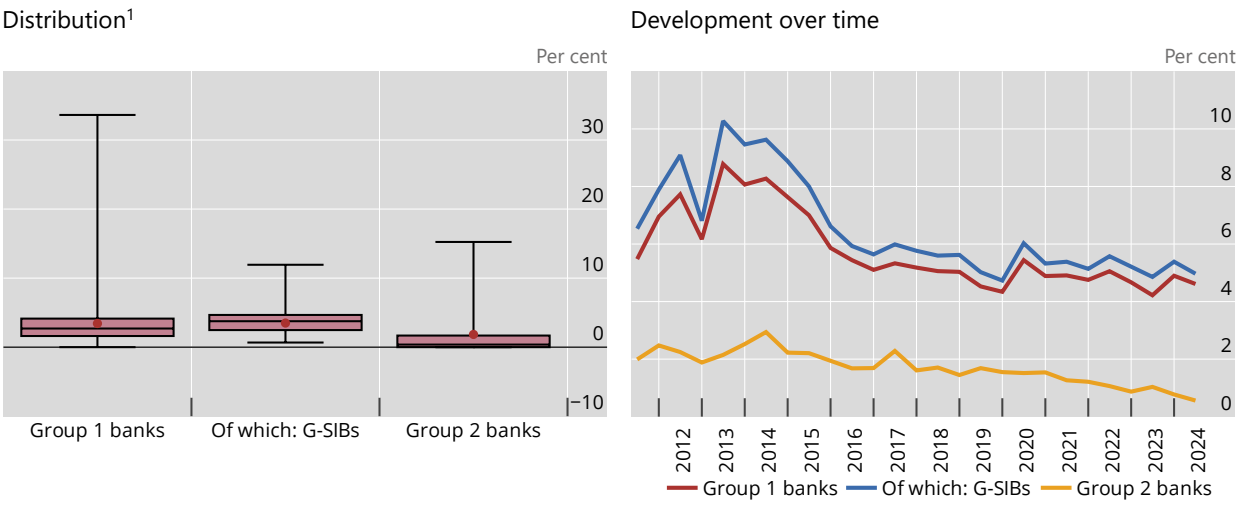
The left-hand panel of Graph 34 shows the distribution of the share of market risk MRC in overall MRC under the current rules, ie jurisdiction-specific Basel 2.5 implementations. The median share of market risk MRC in total MRC is 2.7% for Group 1 banks and 0.4% for Group 2 banks respectively, while the shares of aggregate market risk MRC compared to aggregate MRC are 3.4% for Group 1 banks and 1.8% for Group 2 banks. However, there is significant dispersion in shares of market risk MRC in total MRC from 0% to 33.6%.[34]

As the trends starting in 2011 in the right-hand panel of Graph 34 show, after the June 2022 upturn (which was likely due to increased value-at-risk (VaR) estimates driven by higher market volatility in response to the war in Ukraine and the significant central banking tightening cycle that commenced in the first half of 2022), the share of market risk MRC to overall MRC resumed its downward trend. In the first half of 2024, the share of market MRC to overall MRC declined for all three groups of banks. Group 1 banks, Group 2 banks and G-SIBs had declines of 0.3, 0.2, and 0.4 percentage points.

The longer-term trend continues for all groups of banks, which have seen their share of capital requirements attributed to market risk decline by respectively of 47%, 52% and 81% since their peak between 2013 (Group 1 banks and G-SIBs) and 2014 (Group 2 banks). As of December 2023, the average share for all groups of banks has remained below the level seen at end-June 2011 even after a recent spike in volatility.[35]

Share of market risk MRC in total MRC under the current rules

Balanced data set — Graph 34



[1] See Section 1.3.3 for details on box plots.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Graph 35 below shows time series decompositions of reported market risk MRC by sub-component since end-June 2015. For Group 1 banks and the G-SIBs among them, the contributions of the internal models approach (IMA) to total market risk MRC are 62.2% and 74.2% respectively as of June

[34] For this round of the exercise, a few banks already reported revised market risk data through supervisory reporting.

[35] Data from 2011 should be viewed in light of the fact that many jurisdictions implemented Basel 2.5 beginning in 2012, so the 2011 numbers were reflective of the prior Basel II standards that resulted in significantly lower capital requirements.

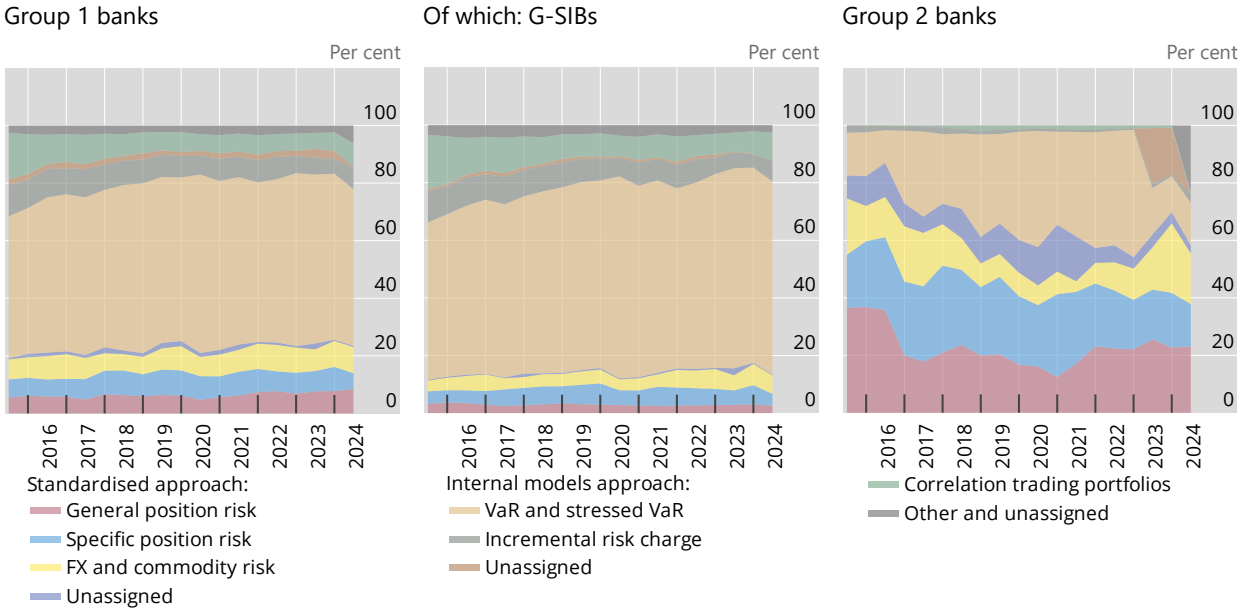
2024. This contribution from IMA was generally a decrease from year-end 2023 as interest rates peaked and market volatility subsided, resulting in more normalised markets.

Since 2015, the share of overall market risk MRC composed of VaR and stressed VaR (SVaR) has generally increased over time while the shares of both the incremental risk capital charge and correlation trading portfolios (CTPs) in the total market risk MRC have generally decreased. The first half of 2024 saw a noticeable reversal in this trend with an increase in the contribution from the incremental risk charge for both G-SIBs and Group 1 banks.

For Group 2 banks, the IMA contribution in the total market risk MRC, which is generally less relevant, decreased significantly from 29.4% at end-2023 to 17.7%. The contribution from CTPs, which is relatively negligible for Group 2 banks, decreased to from 0.8% as of year-end 2023 to 0.7% as of June 2024, although their share remains elevated compared with 2015.[36]

Components of MRC for market risk under the current rules

Unbalanced data set, in per cent — Graph 35



Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Graph 36 below shows the ratio of the 10-day 99th percentile stressed VaR to the current 10-day 99th percentile VaR under current market risk rules using two sets of balanced data from Group 1 banks. The left-hand panel shows the time series since end-2011 for seven banks. Under this longer-run balanced data set, for the initial several years, the ratio of stressed VaR to VaR fluctuated around 200% with a local peak at 363% in mid-year 2018. After dipping to 174% in the first half of 2020, the ratio subsequently rose to 338% as of year-end 2021 before dropping again. As of June 2024, the ratio is sitting at 234% and has increased for the previous two quarters.

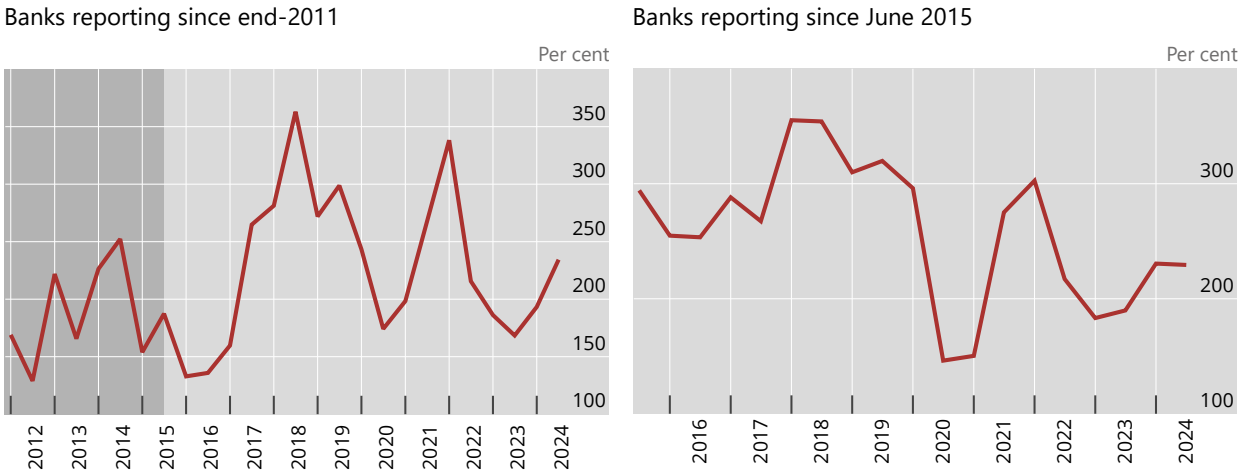
The right-hand panel of Graph 36 shows the same ratio for a shorter-run balanced data set including 22 banks that have provided data since 2015. For this larger sample, the ratio has generally increased, reaching its pre-pandemic peak in end-2017 at 355% before dropping by nearly half to 146% as of end-June 2020 and subsequently rebounding to a new high of 303% as of year-end 2021 and subsequently falling to 229% as of June 2024.

[36] The large increase in the share of "Other and unassigned" for Group 2 banks is driven by a single bank reporting its entire current market risk MRC as belonging to that category.

VaR models are typically based on a fixed backward-looking period, often one year, that rolls forward over time. In contrast, SVaRs are based on historical high volatility stress periods, such as the 2008 global financial crisis or the onset of the Covid-19 pandemic, that typically change infrequently. In both time series, the increasing trend prior to the outbreak of Covid-19 can be attributed at least partially to the lower volatility environment that had been observed in the markets over the several years preceding the Covid-19 pandemic, which reduced VaR without reducing SVaR. The pandemic-related volatility experienced in markets in the first quarter of 2020 increased banks' VaRs substantially more than their SVaRs. This led the SVaR/VaR ratio to decline significantly across the banks. Thus, as banks' current VaRs fall in low volatility periods, the ratio becomes elevated. However, the huge increase in volatility seen during March 2020 with the onset of the Covid-19 pandemic reversed this trend, leading to a dramatic fall in ratio for end-June 2020. Markets in 2021 were much less volatile due in part to the extraordinary official sector policy responses to the pandemic across the globe. This effect, combined with the fact that the one-year lookback periods no longer included the volatility seen in March 2020, led to the ratio rising substantially across both samples at year-end 2021. As mentioned above, from 2022 a return of volatility across all risk classes has been seen due to the war in Ukraine and its impact on energy, grain and metals markets, the tightening cycle, a bear market in equities from the record levels and considerable movements in foreign exchange as the US dollar appreciated in 2022 to levels not seen in 20 years. More recently, starting in March 2023, the banking system experienced the most significant system-wide stress since the Great Financial Crisis which culminated in a series of bank failures. These developments corresponded with some of the largest drops in the SVaR/VaR ratios observed since both time series began. The last year has seen SVaR/VaR ratios increase to more normal levels, as volatility has declined in many markets.

Stressed value-at-risk in relation to current value-at-risk

Group 1 banks, balanced data set — Graph 36



Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

4.4.2 Overall impact of the revised minimum capital requirements for market risk

Basel III monitoring market risk data tend to be more variable both over time and across reporting banks than that of other areas of the Basel III monitoring exercise owing to the short term and ever-changing nature of trading portfolios when compared with banking book portfolios, which are mostly held-to-maturity or revolving. In addition, while improving in data quality with each collection, the Basel III monitoring estimates for market risk under the final market risk standard are less robust than those that banks make for the banking book as the impact estimates still require significant manual intervention for many trading positions at banks that have yet to develop systems reflecting their local implementations.

Although prior collections included banks' estimates of the capital impact of the final standard, the additional time has allowed banks to refine their calculations, which likely improved the accuracy of their estimates.

The estimates below show impacts based on banks' current portfolios and do not reflect potential changes to their portfolios upon implementation of the final standard. Banks had the opportunity to report their capital requirements based either on the current or intended set of model-approved trading desks.

On one hand, this methodology likely overstates the ultimate impact subsequent to implementation, as banks may reduce their exposures to positions with high capital requirements. On the other hand, the methodology does not reflect the consequences of trading desks potentially failing backtesting or P&L attribution tests (PLATs) based on the banks' submitted desk-level VaR and P&L data, which would likely understate the impact for IMA banks whose desks are not passing these tests. It is not clear which of these countervailing effects will dominate, although market risk capital requirements are generally expected to increase significantly.

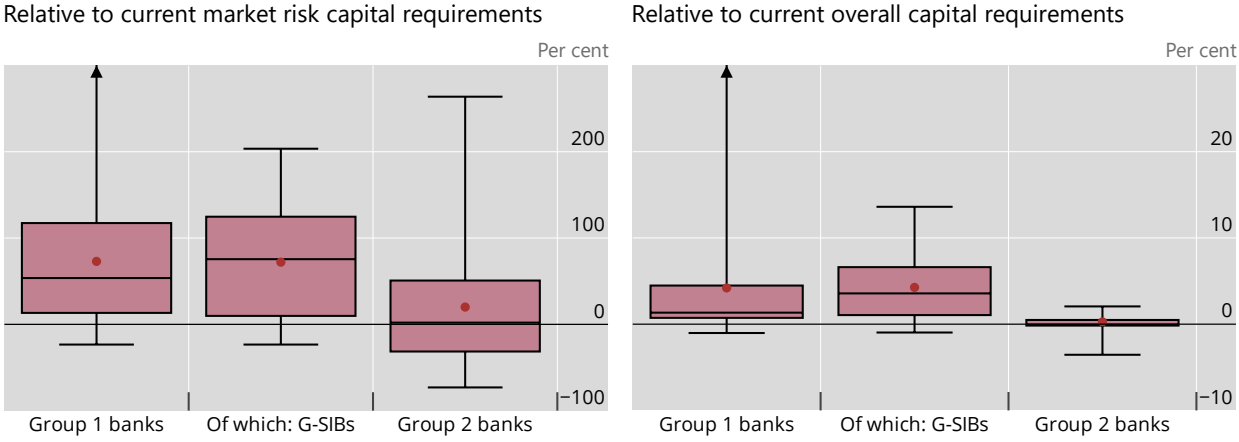
More than 70 banks from 18 jurisdictions provided at least some market risk data as of June 2024. Of these banks, 36 provided data that could be used to estimate the overall impact from the revised market risk framework.

Graph 37 below shows the revised market risk standards' impact versus current market risk MRC and total MRC. The final Basel III market risk capital requirements relative to current market risk capital requirements increase by 53.7% for the median Group 1 bank and by 75.5% for the median G-SIB, while Group 2 banks see a 2.0% increase in their median. The weighted average expected increase was 73.0%, 72.1% and 20.0% for Group 1 banks, G-SIBs and Group 2 banks, respectively. There is wide variability at bank level: outliers are far more extreme ranging from a 906.6% increase a Group 1 bank, to a 73.1% decrease at a Group 2 bank.

Compared to banks' overall MRC rather than only market risk capital requirements, the revised standards result in a much more modest increase of 1.3% for the median Group 1 bank, 3.6% for the median G-SIB and 0.0% for the median Group 2 bank. On a weighted average basis, all three groups see increases in market risk's contribution to total capital of 4.2%, 4.3% and 0.3%, respectively. Also in this case, there is wide variability at bank level, especially in the Group 1 sample: outliers are ranging from an increase of 39.0% to a *decrease* of 1.0% in overall capital requirements.

Impact on MRC of the revised standards for minimum capital requirements for market risk[1]

Graph 37



[1] See Section 1.3.3 for details on box plots.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Graph 38 decomposes the total market risk capital requirements under the current rules and under the revised standards. The breakdown includes components due to the standardised approach (SA) and internal models approach (IMA), and further breaks these components down into their sub-components for the revised standards.

Group 1 banks expect their share of standardised approach capital requirements to increase from 45.7% to 59.3%. The vast majority of Group 2 banks' market risk capital requirements comes from the standardised approach and this is not expected to change under the revised standard.

For positions subject to the revised standardised approach, for Group 1 banks, 71.7% of the standardised approach capital requirement are expected to be attributed to the sensitivities-based method (SbM). For Group 2 banks, the share of the SbM is 92.0%. The default risk capital (DRC) requirement contributes 25.4% and 6.7% to the total standardised approach capital requirements for Group 1 and Group 2 banks, respectively. The residual risk add-on (RRAO), which accounts for risks not fully covered by the SbM or the DRC (including risks related to exotic derivatives and instruments containing gap risk, correlation risk and behavioural risks including prepayment risk), contributes 2.9% to the standardised approach capital requirement for Group 1 banks and 1.3% for Group 2 banks' SA capital requirement.

With respect to the revised IMA, the capital requirement for modellable risk factors would contribute 40.9% to the total IMA capital requirements (including modellable and non-modellable risk factors as well as the DRC) for Group 1 banks. The corresponding shares of IMA capital requirements from non-modellable risk factors and the DRC are 21.3% and 37.9%, respectively. No Group 2 banks reported that they intend to adopt IMA under the revised framework.

Breakdown of MRC for market risk by approach and risk component under the current rules and the revised standard

Graph 38

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

4.5 Operational risk

4.5.1 Current operational risk rules

MRC for operational risk of Group 1 banks increased until end-2016 and levelled-off till 2022. For the last reporting dates, capital increases are observed for several reasons. On the one hand, more banks move to the new standardised approach and so far, in the period of transition it is observed that this goes along with a slight capital increase. This was unexpected as especially the jurisdictions with expected capital decreases implemented the new standardised approach. But different from what was indicated in previous monitoring exercises, some jurisdictions implemented the Basel III framework in a more conservative way, for example with a minimum ILM of one. This avoided the expected drop of the capital requirements.

On the other hand, all banks that use an indicator-based approach including the new standardised approach observed capital increases just due to an increasing business volume, while banks using an Advanced Measurement Approach (AMA) have stable capital requirements (see Graph 39). Due to the phase-out of financial crisis losses, for several years AMA banks had decreasing MRC, which compensated the increasing capital requirements of the indicator-based approaches. This led to the above-described stable capital situation between 2016 and 2022.

Due to the renewed rise of operational risk-MRC, the decreasing share of operational risk MRC compared with other risk categories is stopped and thus, the share of operational risk MRC as a percentage of total MRC is stable; it is currently 11.9% for Group 1 banks and 12.9% for G-SIBs (see Graph 41). For Group 2 banks, the share of operational risk MRC as a percentage of total MRC is 12.1%.

The evolution of losses over the past 10 years is depicted in Graph 40. The loss evolution started to decline since 2014 and has stabilised in recent years. Over the 10-year window, we observe in total €455.4 billion of gross and €401.6 billion of net operational risk losses. Operational risk gross losses peaked in 2014 at €78.7 billion. Since then, gross losses have decreased significantly to €32.5 billion in 2023, the lowest value of the past 10 years. This decreasing trend was observed despite the Covid-19 pandemic.

The time-lagged impact of the financial crisis on banks' profits, notably due to long-standing lawsuits, appears to be completed. Nevertheless, banks still face risk due to the digitalisation that amplifies IT risk, potential afterpains of the Covid-19 pandemic or the war in Ukraine with its imponderabilities that could, for example, increase legal risks.

For Group 1 banks and G-SIBs, most of which use the AMA as the primary method for calculating operational risk capital, the increase in the first half of the 2010s is largely explained by the surge in the number and severity of operational risk events during and after the financial crisis.

For Group 1 banks as a whole (see Graph 39), this resulted in a significant increase of total MRC for operational risk and the share of MRC for operational risk under the AMA increasing from 64.2% in 2011 to about 73.2% at end-June 2017. On the other hand, AMA banks benefit from the recent low-loss environment, which resulted in slightly decreasing MRC for operational risk despite an increasing business volume. This development explains the lower share of MRC for operational risk under the AMA of 53.0% for the mid-2024 reporting date. As more jurisdictions started to apply the new standardised approach that replaces all previous approaches, the new standardised approach represents currently 31.8% of the Group 1 and 12.9% of the Group 2 MRC for operational risk in the sample and is likely to increase in the upcoming years when more jurisdictions implement the final Basel III framework.

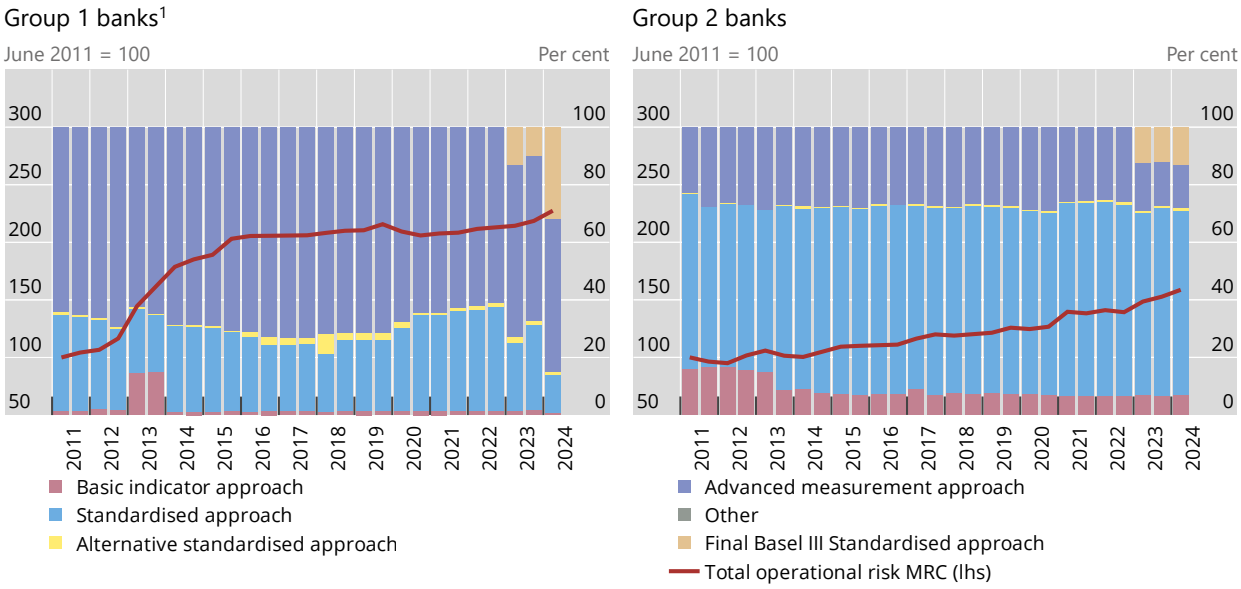
The continuous increase in MRC for operational risk for Group 2 banks, most of which calculate operational risk capital requirements under the framework's non-model-based approaches,[37] is largely

[37] These comprise the Basic Indicator Approach (BIA), the Standardised Approach (TSA) and its variant, the Alternative Standardised Approach (ASA).

due to an increase in business volume, a factor captured by the financial statement-based components of the standardised approaches.

Total MRC for operational risk and share of approaches

Balanced data set — Graph 39

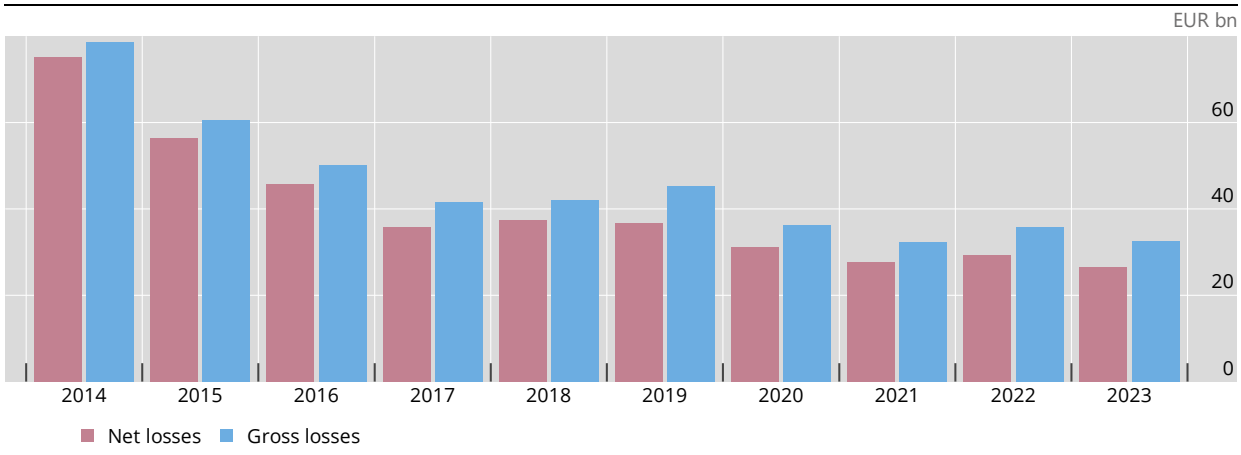


[1] Some banks started reporting operational risk RWAs under the Basic Indicator Approach in 2013 and eventually migrated to the Standardised Approach in 2014.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Loss evolution over the past 10 years

All banks, sample and exchange rates as at the current reporting date — Graph 40



Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

The dominance of indicator-based properties found in the standardised approaches for operational risk mainly reflects the size or business volume of a bank rather than its risk exposure, explaining the lower variance of MRC for most Group 2 banks (see Graph 41). For Group 2 banks, the difference between the 25th and 75th quantiles of the share of MRC for operational risk in total MRC is

7.5 percentage points. Although the difference of 6.3 percentage points for Group 1 banks is similar, the difference for G-SIBs (13.7 percentage points) is significantly higher. This observation in combination with the weighted average (11.9% for Group 1 banks and 12.9% for G-SIBs) being higher than the median (10.4% for Group 1 banks and 12.2% for G-SIBs) still indicates a positive correlation between size and an above-average operational risk profile.

The outliers among Group 2 banks are mostly fee business-specialised banks where operational risk is largely an exclusive risk, while outliers among Group 1 banks and G-SIBs are banks that use AMA where past loss events influence future operational risk exposure.

Distribution of share of MRC for operational risk in total MRC[1] Graph 41

[1] See Section 1.3.3 for details on box plots.

Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Lately, more jurisdictions started to implement the final Basel III framework for operational risk fully or with certain phase-in arrangements that allow some banks of a jurisdiction to use still the old framework in the interim period. For banks having already implemented the framework, Table 6 shows certain key figures mainly as a share of total assets. Only for the net interest margin (NIM), the interest-earning assets (IEA) are used as denominator instead to better reflect the impact of the NIM cap of 2.25%. This approach allows to make numbers comparable without showing confidential data and to analyse differences in capital requirements due to regional differences of NIM and its impact on the indicator composition or regional differences of loss experiences.

For Group 1 banks, we observe that applying the less risk-sensitive business indicator component (ILM=1) only would lead to capital requirements of 0.32% BIC on total assets. the main driver might be the interest lease and dividend component, which is dominated by an aggregated NIM ratio of 1.63% for Group 1 banks – significantly lower than the NIM cap of 2.25%. Nevertheless, on bank/jurisdiction level, several banks benefit from the NIM cap which is not directly observable with the aggregated data.

Multiplying the BIC of 0.32 on TA with 12.5 would lead to BIC-triggered RWA of around 4% on total assets (same for G-SIBs) but banks report RWA requirements of only 3.87% (3.82% for G-SIBs). The current capital requirements are lower than with ILM=1. Reductions seem to be justified by an LC of 0.13 (0.06 for G-SIBs) which is more than two times lower for Group 1 banks and even more than five times lower for G-SIBs than the BIC. However, the average applied ILM of the current capital requirement at 0.97 (0.96 for G-SIBs)[38] is significantly higher than the calculated one of 0.74 (0.66 for G-SIBs). Some jurisdictions use the national discretion of ILM=1 which could either reduce the average applied ILM if banks have on average an ILM>1 or which increase the average applied ILM in case the average calculated ILM<1.

[38] Difference between applied and calculated ILM see Table 6: average applied ILM= (BIC*12.5/ OpRisk RWA)-1; average calculated ILM = ILM of Table 6.

Surprisingly, especially jurisdictions with G-SIBs have chosen to implement the framework in a more conservative way, so that for these jurisdictions, despite an average ILM of 0.66 is calculated, the average applied ILM is significantly higher. These conservative implementations especially for G-SIBs overcompensate cases where banks benefit from an ILM=1.

Another interesting point to note is that a low operational risk share on total RWA of 7.6% is observed for the rest of the world (7.7% for G-SIBs). It can primarily be explained by a higher RWA density of 49.7% (49.4% for G-SIBs) while the high operational risk share of 13.3% of banks in the Americas might partially be triggered by a low RWA density of only 32.2%.[39]

Relevant key metrics for operational risk capital calculation

Banks using final Basel III standards, in per cent (except for ILM) Table 6

	NIM/IEA	LC/TA	BIC/TA	OpRisk RWA/TA	RWA/TA	OpRisk share in RWA	ILM
Group 1 banks	1.63	0.13	0.32	3.87	46.78	8.27	0.74
Of which: Americas	1.54	0.27	0.38	4.27	32.22	13.25	0.90
Of which: RW	1.65	0.10	0.31	3.79	49.66	7.63	0.70
Of which: G-SIBs	1.57	0.06	0.32	3.82	49.38	7.73	0.66

[1] The ILM is calculated via reverse engineering: ILM=average SMA_20k/average BIC. This method could be seen as a weighted ILM based on bank individual ILM and reflects better the real possible outcome on capital outcome.

Source: Basel Committee on Banking Supervision.

4.5.2 Final operational risk standards

The objective of the design and calibration of the revised operational risk framework is to ensure stable capital requirements that are simple to estimate and comparable while remaining risk-sensitive. The revisions aim to accomplish this objective by replacing the existing set of approaches[40] used for the estimation of operational risk capital requirements with the standardised approach. The standardised approach is comprised of a single non-model-based method that combines a financial statement proxy of operational risk exposure (termed the "business indicator" or BI) with bank-specific operational risk-related losses (termed the "internal loss multiplier" or ILM). The following analysis applies the standardised approach to estimate the changes in operational risk MRC and evaluates the impact of the final against the existing framework. It also considers two national discretions: (1) to set the internal loss multiplier equal to one and hence base capital requirements for operational risk solely on the business indicator component for all banks in a jurisdiction; and (2) to have Bucket 1 banks measure their ILM using their loss history, rather than apply ILM=1 to all Bucket 1 banks.[41]

According to Table 7[42], the final operational risk framework generates an aggregate increase in operational risk MRC of approximately 6.8% for all Group 1 banks while G-SIBs will benefit with a decrease

[39] Low RWA density can be explained either by low-risk investments (eg sovereigns with 0% risk weight) or by using aggressive models. The output floor might limit the model impact on RWA density when the final Basel III framework is fully phased in.

[40] Comprised of the basic indicator approach (BIA), the standardised approach (TSA) and its variant, the alternative standardised approach (ASA), along with the internal model-based advanced measurement approach (AMA).

[41] This has been reflected in the calculation by setting the internal loss multiplier to one whenever national supervisory authorities have indicated that they will most likely apply the national discretion.

[42] Note that comparability with previous monitoring reports is reduced for the following reason: the sample size differs between June and December submissions significantly. Furthermore, jurisdictions using already the new standardised approach for calculating the operational risk MRC are not anymore part of the impact analysis in Section 4.5.2. The impact for such jurisdictions would be zero and would therefore distort the result.

of -1.8%. For the Group 2 banks in the sample, an increase of 2.0% is observed. Nevertheless, according to the latest Basel III endgame[43] discussions in the United States to implement the framework with ILM=1, the overall impact and the impact for the Americas in particular might be lower than estimated in this exercise. This is not expected anymore for European jurisdictions as European Union countries already indicate that they opt for the national discretion of ILM=1, which has decreased the expected impact compared to earlier estimates. Despite these differences, Europe still faces a significant increase of around 29.5% for its Group 1 banks, but this is already significantly lower as it would have been with the application of the ILM20k (+63.2%). The Americas (-5.0%) benefit already from a capital reduction that might be further reduced to -24.0% in case of ILM=1. Different from previous reports, the rest of the world would not experience significant decreases anymore, rather there would be a small increase of 1.2%. This is because those jurisdictions that have already implemented the new framework benefitted most from an implementation with ILM20k.

Graph 42 shows the impact on individual level, which varies significantly with an MRC increase of up to 191% or a decrease of up to -54%.

Reasons for the MRC-increase for non-AMA banks are the changes in the calculation method of the new standardised approach where in particular the fee businesses and the business of large banks penalised with higher capital requirements as this is deemed as riskier. Despite the NIM cap of 2.25%, the highest impacts are observed for banks using currently the Alternative Standardised Approach (ASA) or a partial use of ASA and TSA[44].

A counterintuitive observation of decreases in MRC of -5.9% for Group 1 banks (-7.2% for G-SIBs) is made for AMA banks. Banks usually use model approaches to utilise the conservatism buffer of the standard approaches through the use of risk-sensitive models and thus leverage capital reductions. With the more conservative new standardised approach, even higher capital increases than for BIA/TSA banks should be expected. However, in fact especially banks in the Americas due to their high historical loss experiences have AMA capital requirements with significantly higher current capital requirements than they would have to hold, if BIA/TSA were applied. For banks outside the Americas, the opposite is observed and for most of the banks, the current AMA capital requirement is on average lower than it would be with the BIA/TSA. Therefore, despite the more conservative calculation method of the new standardised approach, conservative AMA banks mainly in the Americas could significantly benefit in case the ILM=1 would be applied. Despite the high loss experiences and an ILM>1, most of these banks would still have reductions in MRC in case the ILM is applied. Most of the AMA banks outside the Americas would face a significant increase in MRC with ILM=1, but while the European AMA banks would face further increases in MRC due to high loss experiences (see also Table 7), AMA banks in the rest of the world can either reduce the increasing impact or even generate an overall reduction in MRC thanks to the low loss experiences and an ILM<1.

If all banks used the less risk-sensitive BI component only ("ILM=1", shaded brown in Table 7), the operational risk MRC for Group 1 banks would decrease by -5.5% and by -16.3% for G-SIBs. If all Group 1 banks applied the ILM based on the average losses above €20,000 of the past 10 years ("20k 10Y", shaded green in Table 7), the impact would be 18.2% and around 7.1% for G-SIBs. This indicates that the past losses due to the financial crisis would still have a measurable impact on possible MRC. For example, the comparison between ILM=1 and ILM 20k on a regional level shows that the MRC in Europe (delta of 37.6 percentage points) and the Americas (delta of 19.7 percentage points) – those regions most affected by the operational risk losses during the financial crisis – would still face MRC increases due to these past

[43] See Michael S Barr, *Supporting market resilience and financial stability, 26 September 2024,* www.federalreserve.gov/newsevents/speech/barr20240926a.htm.

[44] Especially with the partial use approach of ASA and TSA, banks active in different geographical locations with significant differences of its NIM could reduce its current capital requirements significantly compared to a plain TSA use. With this approach, entities of a group with a high NIM could cap the NIM at 3.5% by using ASA while entities of a group with low NIM are not forced to use the normalised NIM of 3.5%.

losses[45]. For the remaining jurisdictions of the rest of the world that not yet implemented the new framework, (delta of -1.2 percentage points) almost the same impact is expected.

Nevertheless, given the decreasing trend of losses and the fading out of the financial crisis losses in the upcoming years (see Graph 40), the MRC impact at the time of first implementation of the final Basel III framework may be overestimated due to the risk-sensitive feature of the ILM. In case that the current average losses above €20,000 remain the same as the past five years, the impact for Group 1 banks could drop to 6% (-5.6% for G-SIBs). In case that even the average losses of the past three years remain, the MRC would increase only by 2.7% (-7.8% for G-SIBs). From this decreasing trend in MRC, Europe and the Americas – the most affected regions – would benefit most but starting from a much higher MRC level but even banks in jurisdictions in the rest of the world that have not yet implemented the new framework could benefit from a phase-out of losses and thus a reduced impact of 7.8 percentage points (-6.4% instead of +1.4%).

Changes in MRC for operational risk

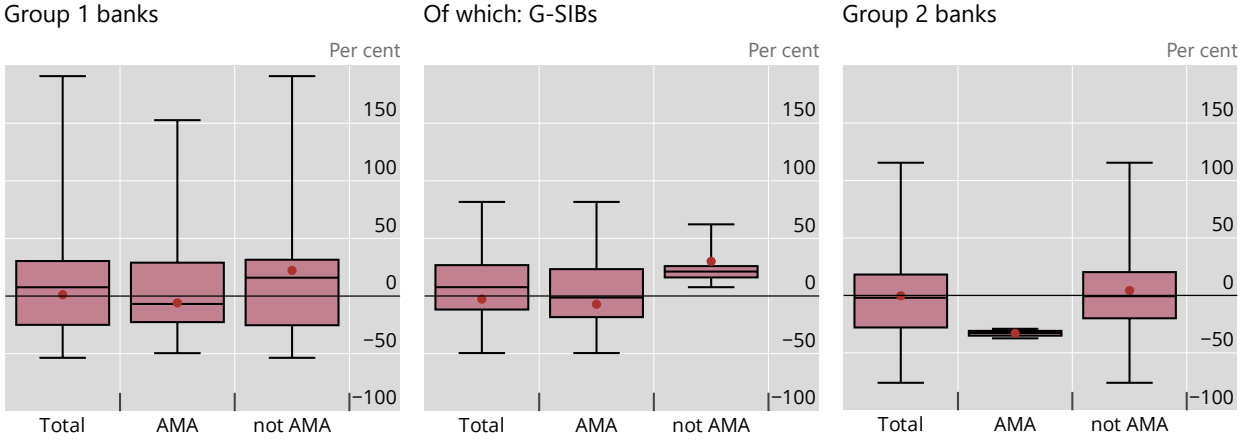
Table 7

	With indicated approach	ILM=1	20k 10Y	100k 10Y	20k 5Y	20k 3Y	ILM=1, unadjusted	20k10y, unadjusted
Group 1 banks	6.8	–5.5	18.2	15.6	6.0	2.7	–5.6	18.9
Of which: Europe	29.5	25.6	63.2	59.2	43.0	41.5	25.6	65.7
Of which: Americas	–5.0	–24.0	–4.3	–6.3	–13.7	–17.4	–24.0	–4.3
Of which: RW	1.2	2.6	1.4	0.2	0.7	–6.4	2.3	1.0
Of which: G-SIBs	–1.8	–16.3	7.1	5.1	–5.6	–7.8	–16.3	7.8
Group 2 banks	2.0	2.8	15.3	8.5	14.8	10.0	2.6	15.5

Source: Basel Committee on Banking Supervision.

Changes in MRC for operational risk[1]

Graph 42



[1] See Section 1.3.3 for details on box plots. For the purpose of this graph, AMA banks are banks that currently calculate some part of their operational risk capital requirements using the AMA.

Source: Basel Committee on Banking Supervision.

[45] Note that due to the phase-out of losses of the financial crisis, the ILM add on in Europe or the Americas is already much lower compared to previous monitoring reports.

With Graph 43 it is possible to explain the effect of differences in the evolution in BIC and LC on the impact on the final MRC of the new standardised approach for operational risk. Especially the decreasing losses since 2015 as shown in Graph 40 might change the interaction between BIC and LC. To make numbers comparable without showing confidential data, the values are converted to a fraction of the *reported 2017 operational risk MRC*.[46] The analysis comprises a balanced set of 66 banks, 27 of them are AMA banks.

For AMA banks, the left-hand panel of Graph 43 shows that the business-driven BIC is constantly growing from 64.2% in 2017 to 81.9% in 2023 (a change of +17.7 percentage points). On the other hand, the loss component was relatively stable until 2019 and decreases since then. Despite the decreasing losses since 2015, the loss component could not directly decrease as until 2019, pre-financial crisis low-loss years were just replaced by similar low-loss years after 2014. This changed in 2020, as high-loss years triggered by the financial crisis started to be replaced by the lately observed low-loss years. This caused a quick decrease of the loss component from its peak of 251.2% in 2018 by about 84.5 percentage points to 166.7% in 2023. This trend might continue for some further years as still high-loss years of the financial crisis affect the loss component of many AMA banks. These high-loss years can be replaced if the lately observed trend of low-loss years continues, even if the losses start to increase a little.

Despite the fact that the loss component decreases a bit more than the BIC increases, the final MRC of the new standardised approach for ILM 20k is still increasing by around 7% over the past seven years as due to the logarithm feature of the ILM, the loss component has only a diminished impact. This diminishing effect is even stronger for banks whose loss component is already significantly higher than the BIC. This is currently true for the "average Group 1 bank", whose average loss component of 2023 is still about two times higher than the average BIC of 2023. The average ILM in such a case is roughly 1.25 and is reflected in the difference between 81.9% BIC and 98.7% "20k new SA". This ratio is already significantly lower as in 2017 when the loss component to BIC ratio was about 4. Nevertheless, despite the fade out of losses in the 10-year window, they still drive the "20k new SA" capital requirements and even the current AMA MRC. If these banks would use the Basic Indicator Approach instead of the AMA (hypothetical BIA), the current MRC in 2023 would be 66.8%, ie about 34.6 percentage points lower than with the current AMA (101.5%).

A different picture can be observed for the non-AMA Group 1 banks presented in the right-hand panel of Graph 43. In 2023, the hypothetical BIA is about 7.9 percentage points higher than current MRC, which indicates that these banks use a less conservative approach to measure their risk exposure and benefit from the use of the current indicator-based approaches of ASA or SA. Different to the hypothetical BIA, the BIC increased with a higher rate of 30.5 percentage points from 118.5% to 149.0%, which represents a relative increase of about 25.7%. The LC increased at the same time just by about 13.0% from 179.8% in 2017 to 203.3% in 2023.[47] Despite the LC increases with a slightly smaller rate than the BIC, for non-AMA banks, which are usually smaller Group 1 banks, a phase-out of financial crisis losses are not as obvious as for AMA banks. The observed reduced impact of the LC could still be more a point in time observation where the LC average growth is sometimes below and sometimes above the BIC average growth. The ratio of the average LC to the average BIC for these banks is only 1.36 in 2023, which would lead to an ILM of about 1.1.

Nevertheless, despite an ILM>1 derived from average LC/BIC, the aggregated "20k new SA" is below the aggregated BIC and indicates – contrary to what is expected – a real ILM of less than 1 ("20k new SA"/BIC=0.92). This can be explained by the cumulative LC, which is mainly influenced by just a few

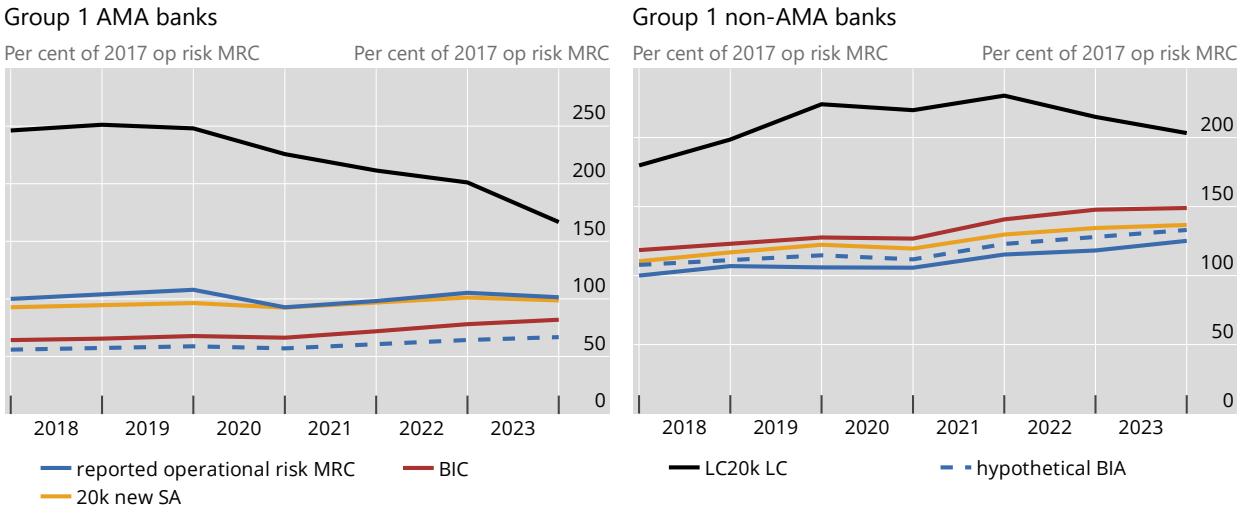
[46] In the previous Basel III monitoring report, data were converted to a fraction of 2021 operational risk MRC. The choice to adopt a different value base to normalise data prevents a comparison of Graph 43 with the one shown in the previous monitoring report.

[47] Differences in the hypothetical BIA show that the values of non-AMA banks and AMA banks cannot be compared easily. Although the financial crisis losses in 2023 with a loss component of 198.6% for non-AMA banks seem to be higher than the ones of AMA banks (166.7%), they are indeed about 1.7 times as high for AMA banks if the loss component values are divided by their hypothetical 2023 BIA (66.8% for AMA and 134.5% for non-AMA banks).

banks experiencing high losses while most of the banks have low losses compared to their BIC. Thus, the high losses of these few individual banks lead to a below average contribution of their losses to its capital requirements resulting in an aggregated "20k new SA" requirement of Group 1 non-AMA banks lower than the aggregated BIC requirement despite the aggregated LC is greater than the aggregated BIC.

Evolution of new SA components

Balanced data set — Graph 43



Source: Basel Committee on Banking Supervision. See the Excel data file for underlying data and sample size.

Like Table 6, Table 8[48] shows certain key figures that explain main drivers of the capital requirements but for banks having not yet implemented the final Basel III framework. In this table, the reported operational risk RWA still stem from the approach chosen under the old framework.

For Group 1 banks, we observe that the less risk-sensitive indicator would lead to capital requirements of 0.47% of total assets but with significant geographical differences.

The NIM, significantly higher in the Americas (2.14%) than in Europe (1.40%), might be one source to explain the significantly higher BIC on total assets of 0.62 in the Americas compared to 0.37 in Europe. But as the NIM for the rest of the world is with 2.44 even higher than for the Americas, differences in the business model like the fee-based investment banking might further explain the high BIC of the Americas.

Further significant differences can be observed for the LC, which is almost twice as high in the Americas (1.38) than in the rest of the world (0.75) and still around 31% higher than in Europe. Despite the higher losses in the Americas, the impact on the ILM at 1.26 is even lower as in Europe (1.30) as the ratio between LC and BIC is lower.

In case ILM=1 only would be applied, the BIC of 0.47 of total assets of Group 1 banks multiplied with 12.5 would result in operational risk RWA of almost 5.9% of total assets. This represents a slight decrease of almost -6% compared to the currently reported 6.2% and is in line with the observation made in Table 7 that a slight capital decrease is observed for ILM=1.

A comparison of the LCs seems to explain the high operational risk share of the Americas (19.8%) compared to the lower share of 11.9% for Europe and 11.1% for the rest of the world. Nevertheless, especially Europe's operational risk share of about 11.9% should also be put in comparison with the low overall RWA density of 32.0% (51.7% for Americas and 52.8% for the rest of the world). The significantly

[48] The calculated numbers for the final Basel III framework are not yet based on supervisory data, and dependent on the implementation, for example on the threshold for BI buckets, the impact may differ.

lower operational risk RWA of Europe compared to the Americas (10.2%) or the rest of the world (5.9%), expressed as share of total assets (3.8%), might help explaining why Europe observes significant capital increases even with the choice of ILM=1.

Relevant key metrics for operational risk capital calculation

Banks not yet using final Basel III standards, in per cent (except for ILM) Table 8

	NIM/IEA	LC/TA	BIC/TA	OpRisk RWA/TA	RWA/TA	OpRisk share in RWA	ILM
Group 1 banks	1.76	1.14	0.47	6.29	41.03	15.32	1.25
Of which: Europe	1.40	1.05	0.37	3.79	31.96	11.86	1.30
Of which: Americas	2.14	1.38	0.62	10.23	51.73	19.77	1.26
Of which: RW	2.44	0.75	0.43	5.89	52.83	11.14	0.99
Of which: G-SIBs	1.52	1.13	0.48	7.21	38.28	18.83	1.28
Group 2 banks	1.39	0.61	0.33	4.02	31.74	12.66	1.12

[1] The ILM is calculated via reverse engineering: ILM=average SMA_20k/average BIC. This method could be seen as a weighted ILM based on bank individual ILM and reflects better the real possible outcome on capital outcome.

Source: Basel Committee on Banking Supervision.

5. Interactions between risk-based, output floor and leverage ratio capital requirements

Graphs and explanations related to interactions between risk-based, output floor and leverage ratio capital requirements are no longer included in the PDF report as they are now available on the "Interactions" tab of the "High-level results and cumulative impact" dashboard on the Committee's website.[49] For this period, related data are still included in the Excel data file accompanying this report (see worksheets "Graph 26r" to "Graph 26t").

6. Liquidity

Graphs and explanations related to liquidity are no longer included in the PDF report as they are now available in the "Liquidity Coverage Ratio" and "Net Stable Funding Ratio" dashboards on the Committee's website.[50] For this period, related data are still included in the Excel data file accompanying this report (see worksheets "Graph 11a" to "Graph 11m").

[49] www.bis.org/bcbs/dashboards.htm?m=99.

[50] www.bis.org/bcbs/dashboards.htm?m=99.

Annex A: Basel III standards and phase-in arrangements

Basel III minimum requirements and buffers

Table A.1

	As of 1 January 2019
Leverage ratio	3.0%
Minimum CET1 ratio	4.5%
Capital conservation buffer	2.50%
G-SIB surcharge	1.0%–2.5%
Minimum common equity plus capital conservation buffer	7.0%
Phase-in of deductions from CET1 (including amounts exceeding the limit for DTAs, MSRs and financials)	100%
Minimum Tier 1 capital	6.0%
Minimum total capital	8.0%
Minimum total capital plus capital conservation buffer	10.5%
Capital instruments that no longer qualify as Tier 1 capital or Tier 2 capital	Phased out over 10-year horizon beginning 2013
Liquidity Coverage Ratio	100%
Net Stable Funding Ratio	100%[1]

[1] Note that as of September 2023, a final rule for the Net Stable Funding Ratio is in force in 26 out of 27 Basel Committee member jurisdictions. See Basel Committee on Banking Supervision, *RCAP: Basel III implementation dashboard*, October 2023, www.bis.org/bcbs/implementation/rcap_reports.htm .

Final Basel III phase-in arrangements

Shading indicates transition periods – all dates are as of 1 January.

Table A.2

	2023	2024	2025	2026	2027	2028
Revisions to the standardised and internal ratings-based approaches to credit risk	Introduce					
Revised CVA and market risk frameworks	Introduce					
Revised operational risk framework	Introduce					
Output floor	50%	55%	60%	65%	70%	72.5%
	Increase in RWA subject to 25% cap at national discretion.					
Leverage ratio exposure measure and G-SIB surcharge	Introduce					

Definition of different Basel III regimes

Table A.3

	Initial Basel III framework	Transitional final Basel III framework	Fully phased-in final Basel III framework
Definition of capital	*Basel III: A global framework for more resilient banks and the banking system*, www.bis.org/publ/bcbs189.htm		
Credit risk	*Basel III: A global framework for more resilient banks and the banking system*, www.bis.org/publ/bcbs189.htm *Capital requirements for bank exposures to central counterparties,* www.bis.org/publ/bcbs227.htm	Basel III: finalising post-crisis reforms, www.bis.org/bcbs/publ/d424.htm Capital requirements for bank exposures to central counterparties, www.bis.org/publ/bcbs227.htm Capital requirements for banks' equity investments in funds, www.bis.org/publ/bcbs266.htm	
Operational risk	Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework, www.bis.org/publ/bcbs128.htm	Basel III: finalising post-crisis reforms, www.bis.org/bcbs/publ/d424.htm	
Market risk	Revisions to the Basel II market risk framework, www.bis.org/publ/bcbs158.htm Guidelines for computing capital for incremental risk in the trading book, www.bis.org/publ/bcbs159.htm	Minimum capital requirements for market risk, www.bis.org/bcbs/publ/d457.htm	
Counterparty credit risk	Basel III: A global framework for more resilient banks and the banking system, www.bis.org/publ/bcbs189.htm	The standardised approach for measuring counterparty credit risk exposures, www.bis.org/publ/bcbs279.htm	
CVA	Basel III: A global framework for more resilient banks and the banking system, www.bis.org/publ/bcbs189.htm	Basel III: finalising post-crisis reforms, www.bis.org/bcbs/publ/d424.htm Targeted revisions to the revised CVA framework published in July 2020 are **not** yet considered for the end-December 2019 reporting date. They will be reflected in the exercise on the end-2020 reporting date. www.bis.org/bcbs/publ/d507.htm	
Securitisation	Basel III: A global framework for more resilient banks and the banking system, www.bis.org/publ/bcbs189.htm	Revisions to the securitisation framework, www.bis.org/bcbs/publ/d374.htm	
Floor	Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework, www.bis.org/publ/bcbs128.htm	Output floor of 50%, Basel III: finalising post-crisis reforms, www.bis.org/bcbs/publ/d424.htm	Output floor of 72.5%, Basel III: finalising post-crisis reforms, www.bis.org/bcbs/publ/d424.htm
Leverage ratio	Basel III: A global framework for more resilient banks and the banking system, www.bis.org/publ/bcbs189.htm; Basel III leverage ratio framework and disclosure requirements, www.bis.org/publ/bcbs270.htm	Basel III: finalising post-crisis reforms, www.bis.org/bcbs/publ/d424.htm; Leverage ratio treatment of client cleared derivatives www.bis.org/bcbs/publ/d467.htm	

Minimum and target risk-based capital and leverage ratio requirements

Fully phased-in final Basel III standards, in per cent — Table A.4

	Fully implemented risk-based requirement			Fully implemented leverage ratio requirement	
	Minimum	Target non-G-SIBs	Target G-SIBs	Minimum all banks and target non-G-SIBs	Target G-SIBs
CET1 capital	4.5	7.0	8.0–9.5		
Tier 1 capital	6.0	8.5	9.5–11.0	3.0	3.5–4.25
Total capital	8.0	10.5	11.5–13.0		

Annex B: Sample statistics

Number of banks for which data have been included[1]

Group 1 banks

Table B.1

	All	RWA and Capital	Leverage	LCR	NSFR
Australia	4	4	0	4	4
Belgium	3	3	3	3	2
Brazil	2	2	2	2	2
Canada	6	6	6	6	6
China	6	6	6	6	6
France	5	5	5	5	4
Germany	11	11	11	11	4
India	9	9	9	9	9
Italy	2	2	2	2	2
Japan	16	16	16	16	16
Korea	8	8	8	7	2
Mexico	2	2	2	2	2
Netherlands	4	4	4	4	4
Saudi Arabia	3	3	3	3	3
Singapore	3	3	3	3	3
South Africa	4	4	4	4	4
Spain	2	2	2	2	2
Sweden	3	3	3	3	3
Switzerland	1	1	1	1	1
Türkiye	3	3	3	3	3
United Kingdom	5	5	5	0	5
United States	13	13	13	13	11
Total	115	115	111	109	98
Of which: G-SIBs	29	29	29	26	28

[1] The regional grouping to which a country is assigned is included in parentheses. AM denotes Americas, EU Europe and RW the rest of the world. While two G-SIBs merged in Switzerland in 2023, due to ongoing work on the new reporting infrastructure, data have been provided as if the two banks were still separate entities for this reporting date.

Source: Basel Committee on Banking Supervision.

Number of banks for which data have been included[1]

Group 2 banks — Table B.2

	All	RWA and Capital	Leverage	LCR	NSFR
Argentina	3	3	3	3	3
Australia	1	1	0	1	0
Belgium	2	2	2	2	1
France	2	2	2	2	1
Germany	18	18	17	18	5
Indonesia	2	2	0	1	2
Italy	6	6	6	6	5
Japan	1	1	1	1	1
Luxembourg	3	3	3	3	3
Mexico	4	4	4	4	4
Netherlands	4	4	4	4	3
South Africa	2	2	2	2	2
Spain	4	4	4	4	3
Sweden	3	3	3	3	3
Switzerland	3	3	0	0	0
United Kingdom	3	3	3	0	2
Total	61	61	54	54	38

[1] The regional grouping to which a country is assigned is included in parentheses. AM denotes Americas, EU Europe and RW the rest of the world.

Source: Basel Committee on Banking Supervision.

Additional sample statistics[1]

In billions of euros — Table B.3

	Number of banks	Tier 1 capital	Risk-weighted assets	Accounting total assets	Leverage total exposure
Group 1 banks	100	5,683	36,793	87,726	92,825
Of which: Europe	29	1,325	7,968	25,657	26,157
Of which: Americas	22	1,487	9,845	22,523	25,689
Of which: Rest of the world	49	2,871	18,981	39,546	40,979
Of which: G-SIBs	29	4,072	26,617	64,427	67,605
Group 2 banks	38	180	876	2,751	2,657

[1] Tier 1 capital, RWA and leverage ratio exposure assume full implementation of Basel III.

Source: Basel Committee on Banking Supervision.

Number of banks for which data have been included in the assessment of the impact of the final Basel III framework

Table B.4

	Group 1 banks
Belgium	2
Brazil	2
Canada	6
China	6
France	4
Germany	3
India	9
Italy	2
Japan	16
Korea	8
Mexico	2
Netherlands	4
Saudi Arabia	2
Singapore	3
South Africa	4
Spain	2
Sweden	3
Switzerland	1
Türkiye	3
United Kingdom	5
United States	7
Total	94

Source: Basel Committee on Banking Supervision.

Number of banks for which data have been included in the assessment of the impact of the final Basel III framework

Table B.5

	Group 2 banks
Argentina	3
Belgium	1
France	1
Germany	7
Italy	5
Japan	1
Luxembourg	3
Mexico	4
Netherlands	3
South Africa	2
Spain	3
Sweden	3
United Kingdom	3
Total	39

Source: Basel Committee on Banking Supervision.

Annex C: Previous monitoring reports published by the Basel Committee

December 2010	*Results of the comprehensive quantitative impact study*, December 2010, www.bis.org/publ/bcbs186.htm	
April 2012	*Results of the Basel III monitoring exercise as of 30 June 2011*, www.bis.org/publ/bcbs217.htm	
September 2012	*Results of the Basel III monitoring exercise as of 31 December 2011*, www.bis.org/publ/bcbs231.htm	
March 2013	*Results of the Basel III monitoring exercise as of 30 June 2012*, www.bis.org/publ/bcbs243.htm	
September 2013	*Basel III monitoring report,* www.bis.org/publ/bcbs262.htm	
March 2014	*Basel III monitoring report,* www.bis.org/publ/bcbs278.htm	
September 2014	*Basel III monitoring report,* www.bis.org/publ/bcbs289.htm	
	Main findings of the trading book hypothetical portfolio exercise	Diana Iercosan, Derek Nesbitt and Arnaud Sandrin
March 2015	*Basel III monitoring report,* www.bis.org/bcbs/publ/d312.htm	
	Analysis of the QIS for the fundamental review of the trading book	
September 2015	*Basel III monitoring report,* www.bis.org/bcbs/publ/d334.htm	
March 2016	*Basel III monitoring report,* www.bis.org/bcbs/publ/d354.htm	
	Comprehensive QIS on interest rate risk in the banking book	Ethan Goh, Kamil Pliszka and Davy Reinard
September 2016	*Basel III monitoring report,* www.bis.org/bcbs/publ/d378.htm	
	Results of the quantitative impact study on the large exposures review clause	Marie-Céline Bard, Ken Taniguchi and Lynnette Withfield
February 2017	*Basel III monitoring report*, www.bis.org/bcbs/publ/d397.htm	
	Impact of the revised minimum capital requirements for market risk	Scott Nagel
	Results of the survey on the interaction of regulatory instruments	Diana Hancock and Doriana Ruffino
September 2017	*Basel III monitoring report*, www.bis.org/bcbs/publ/d416.htm	
	Impact of the revised minimum capital requirements for market risk	Scott Nagel
	Impact of the revised securitisation framework	Bernardo D'Alessandro, Thomas Morck and Emanuela Piani
December 2017	*Basel III monitoring report – Results of the cumulative quantitative impact study*, www.bis.org/bcbs/publ/d426.htm	

March 2018	*Basel III monitoring report*, www.bis.org/bcbs/publ/d433.htm	
	Impact of the revised securitisation framework	Bernardo D'Alessandro, Thomas Morck and Emanuela Piani
October 2018	*Basel III monitoring report*, www.bis.org/bcbs/publ/d449.htm	
March 2019	*Basel III monitoring report,* www.bis.org/bcbs/publ/d461.htm	
September 2019	*Basel III monitoring report,* www.bis.org/bcbs/publ/d477.htm	
	Counterparty credit risk and credit valuation adjustment risk	Alexandra Gebauer, Evariste Beigneux and Giulio Malberti
April 2020	*Basel III monitoring report,* www.bis.org/bcbs/publ/d500.htm	
	Counterparty credit risk and credit valuation adjustment risk	Thomas Blumentritt
December 2020	*Basel III monitoring report,* www.bis.org/bcbs/publ/d512.htm	
	Counterparty credit risk and credit valuation adjustment risk	Thomas Blumentritt and Alexandra Gebauer
September 2021	*Basel III monitoring report,* www.bis.org/bcbs/publ/d524.htm	
	Exclusions from the leverage ratio exposure measure due to Covid-19	Renzo Corrias
February 2022	*Basel III monitoring report,* www.bis.org/bcbs/publ/d531.htm	
September 2022	*Basel III monitoring report,* www.bis.org/bcbs/publ/d541.htm	
	Banks' exposures to cryptoassets – a novel dataset	Renzo Corrias
	Capital buffers and total CET1 requirements including Pillar 2	Irina Barakova and Roberto Ottolini
February 2023	*Basel III monitoring report,* www.bis.org/bcbs/publ/d546.htm	
	Regional distributions of Group 1 and Group 2 banks and their impact on results in the Basel III monitoring reports	Martin Birn, Lea Charlotte Neugebauer and Verena Seidl
September 2023	*Basel III monitoring report,* www.bis.org/bcbs/publ/d554.htm	
March 2024	*Basel III monitoring report*, www.bis.org/bcbs/publ/d570.htm	
October 2024	*Basel III monitoring report*, www.bis.org/bcbs/publ/d581.htm	